

**Social Prescribing in Practice: A Critical Examination of Service Data
and Stakeholder Perspectives**

Jessica Runacres

A thesis submitted in partial fulfilment of the requirements of Birmingham City University for the
degree of Doctor of Philosophy.

The Faculty of Health, Education, and Life Sciences

August 2019

Acknowledgements

The completion of this thesis would not have been possible without the support of many people. Firstly, I would like to thank all those who provided me with their perspectives through participation in research interviews, and the participating social prescribing service who allowed me access to their service user data. These data provided valuable insight into social prescribing.

I am especially thankful to my PhD supervisors, Dr. Sarahjane Jones and Prof. Maxine Lintern who offered advice and support throughout my PhD and provided feedback on numerous chapter drafts.

In addition, I am indebted to my fellow PhD students who accompanied me on this strange and stressful journey. In particular, I am grateful to those in Ravensbury Attic for providing numerous cups of tea, willingness to read my work, and listening ears.

I would like to thank my Mum, Patricia, for her continued love and encouragement. Also, for her proof-reading hundreds of pages of my work. Finally, I am grateful to Tom for providing the practical and emotional support I needed, even if you are still not sure what I do.

Declaration

The candidate confirms that the work submitted is their own and that appropriate credit has been given where reference has been made to the work of others.

Contents

Acknowledgements.....	i
Declaration.....	ii
Contents.....	iii
List of Tables	viii
List of Figures	ix
Abbreviations.....	xi
Abstract.....	xii
Chapter 1: Introduction	1
1.1 The Research Context.....	1
1.2 Research Aim and Objectives.....	3
1.3 Research Design.....	3
1.4 Thesis Outline.....	4
Chapter 2: Social Prescribing	5
2.1 Introduction	5
2.2 Determinants of Health	5
2.3 Person-Centred Care.....	10
2.4 Integrated Care	10
2.5 Defining Social Prescribing.....	12
2.5.1 Parallels with Self-Management.....	13
2.5.2 Models of Social Prescribing	14
2.6 Policy Context for Social Prescribing.....	18
2.7 Conceptualising Social Prescribing.....	25
2.7.1 Theories Considered	25
2.7.2 The Rainbow Model of Integrated Care.....	29
2.7.3 The RMIC as the Theoretical Foundation for This Research.....	32
2.8 Chapter Summary	33
Chapter 3: A Scoping Review of the Social Prescribing Research.....	34
3.1 Introduction	34
3.2 Search Methods.....	35
3.2.1 Identifying the Research Question.....	35
3.2.2 Identifying Relevant Studies	35
3.2.3 Article Selection	37

3.2.4	Charting the Data.....	38
3.2.5	Collating, Summarising, and Reporting the Results.....	39
3.3	Chapter Summary	58
Chapter 4:	Research Design and Methods.....	60
4.1	Introduction	60
4.2	Research Aim and Objectives.....	60
4.3	Philosophical Foundation.....	61
4.3.1	The Application of Critical Realism to This Research	64
4.4	Mixed Methods.....	64
4.4.1	Convergent Parallel Mixed Methods	65
4.5	Study I: Exploring the Service User Population of a Social Prescribing Service	67
4.5.1	Objectives.....	67
4.5.2	Data Collection Methods Considered	67
4.5.3	Data Collection.....	68
4.5.4	The Social Prescribing Service	69
4.5.5	Data Analysis	70
4.5.6	Ethical Considerations.....	70
4.6	Study II: Understanding Key Stakeholders' Experiences of Delivering or Receiving Social Prescribing	71
4.6.1	Objectives.....	71
4.6.2	Sample Selection.....	71
4.6.3	Recruitment	72
4.6.4	Data Collection.....	74
4.6.5	Preparation of the Interview Guide	80
4.6.6	Data Preparation.....	82
4.6.7	Data Analysis	82
4.6.8	Ethical Considerations.....	85
4.7	Rigour.....	86
4.7.1	Rigour in Study I	87
4.7.2	Rigour in Study II	87
4.8	Chapter Summary	89
Chapter 5:	Study I Results	91
5.1	Introduction	91

5.2	Data Collected.....	91
5.2.1	First Dataset	91
5.2.2	Final Dataset	92
5.2.3	Data Quality	92
5.2.4	Implications of Poor Data Quality	95
5.3	Results.....	96
5.3.1	Demographics	96
5.3.2	Process Data.....	100
5.4	Explanations for Poor Data Quality.....	105
5.4.1	Lack of Understanding of the Importance of Data	105
5.4.2	Sensitivity.....	106
5.4.3	Poor System Design	108
5.4.4	Practical Issues with Data Collection	109
5.5	Findings	111
5.6	Chapter Summary	112
Chapter 6: Study II Findings		113
6.1	Introduction	113
6.2	Participants	113
6.2.1	General Practitioners	113
6.2.2	Link Workers	114
6.2.3	Service Users.....	115
6.3	Themes Identified	117
6.4	Person Focussed Care and Clinical Integration.....	120
6.4.1	Treating the Whole Person	120
6.4.2	Service User Reluctance.....	123
6.5	Population Based Care	126
6.5.1	Empowerment for Health Promotion.....	126
6.6	Professional and Organisational Integration	129
6.6.1	Interdependence with Primary Care.....	129
6.6.2	The Versatility of the Link Worker Role	136
6.7	System Integration.....	140
6.7.1	Resource Limitations.....	140
6.8	Functional Integration.....	144

6.8.1	Data Management to Support Work and Evaluation	144
6.9	Normative Integration	153
6.9.1	Discrepancies in Knowledge and Understanding.....	153
6.9.2	Mismatch of Expectations.....	158
6.10	Non-Thematic Results.....	161
6.10.1	The Social Prescription ‘Journey’	161
6.10.2	Examples of Social Prescribing Referrals	164
6.11	Chapter Summary	165
Chapter 7: Discussion.....		166
7.1	Introduction	166
7.2	Implementing Social Prescribing in Practice	166
7.2.1	A Clear Definition and Shared Understanding.....	171
7.2.2	Supportive Context	186
7.2.3	Sufficient and Secure Funding	193
7.2.4	Information Technology Infrastructure	197
7.2.5	Stakeholder ‘Buy-In’	203
7.3	Limitations of the Research	209
7.3.1	Limitations of Study I	209
7.3.2	Limitations of Study II	209
7.4	Chapter Summary	212
Chapter 8: Conclusion.....		214
8.1	Introduction	214
8.2	Contribution to Knowledge.....	214
8.3	Implications of the Research.....	216
8.3.1	For Policy and Practice	216
8.3.2	For Education	218
8.3.3	For Future Research.....	219
8.4	Conclusion.....	220
References		222
Appendices.....		267
Appendix 1: Study I Ethical Approval.....		268
Appendix 2: Study II Ethical Approval (General Practitioners)		269
Appendix 3: Study II Ethical Approval (Link Workers)		270

Appendix 4: Study II Ethical Approval (Service Users)	271
Appendix 5: Study I Permission of Access Letter	272
Appendix 6: Preliminary Information Sheet (General Practitioners).....	273
Appendix 7: Information Sheet (General Practitioners)	274
Appendix 8: Information Sheet (Link Workers)	277
Appendix 9: Information Sheet (Service Users).....	280
Appendix 10: Consent Form (General Practitioners).....	283
Appendix 11: Consent Form (Link Workers)	285
Appendix 12: Consent Form (Service Users).....	287
Appendix 13: Interview Guide (General Practitioners).....	289
Appendix 14: Interview Guide (Link Worker)	290
Appendix 15: Interview Guide (Service Users).....	291
Appendix 16: Service User Recruitment Advert	292
Appendix 17: Summaries of articles included in the scoping review	293

List of Tables

Table 2.1: Descriptions and examples of the models of SP offered by Kimberlee (2015a).....	16
Table 2.2: Policy relating to SP.....	21
Table 2.3: The definitions of primary and integrated care adopted by (Valentijn et al., 2013).....	30
Table 3.1: A numerical summary of the articles included in the synthesis	39
Table 3.2: The outcome measurement tools used in SP evaluations.....	52
Table 3.3: Examples of the reasons for referral to SP services.....	54
Table 4.1: The inclusion and exclusion criteria for each stakeholder group	72
Table 4.2: Methods of data collected adopted in each participant group	79
Table 5.1: Variables collected, example data, and the completeness of each variable	95
Table 5.2: The distribution of service users' ethnicity compared to the area population	98
Table 5.3: The percentage of referrals received from each source.....	101
Table 5.4: The kappa values and interpretation for each reason for referral	102
Table 6.1: The demographics of participating GPs (n= 18).....	114
Table 6.2: The demographics of participating link workers (n= 15)	115
Table 6.3: The demographics of participating service users (n= 18)	116
Table 6.4: The themes, sub-themes, participant group in which they were present, associated research questions, and related domain of the revised RMIC	118

List of Figures

Figure 2.1: The main determinants of health (Dahlgren and Whitehead, 1991)	6
Figure 2.2: The revised RMIC. Source: (Valentijn, 2016: 160).	29
Figure 3.1: Article selection flow diagram based on PRISMA (Moher et al., 2009).....	38
Figure 4.1: The linear relationship of the research paradigm elements. Adapted from White (2012: 41)	61
Figure 4.2: The applied convergent parallel design Adapted from Creswell and Plano Clark (2011: 56).	66
Figure 4.3: The participating service’s SP pathway.....	69
Figure 5.1: Distribution of males and females across age categories.	97
Figure 5.2: The distribution of service users and LSOAs in the most and least deprived deprivation indices categories.....	99
Figure 5.3: Comparison of the distribution of service users and LSOAs across the levels of deprivation indices	100
Figure 5.4: Reasons for referring service users by GPs and link workers	102
Figure 5.5: Percentage of each type of referral	103
Figure 5.6: Venn diagram depicting examples of the five categories of SP referrals	104
Figure 6.1: Thematic map of the themes identified and key.....	119
Figure 6.2: The theme ‘treating the whole person’ and its sub-themes.	120
Figure 6.3: The theme ‘service user reluctance’	123
Figure 6.4: The theme ‘empowerment for health promotion’ and its sub-themes.	126
Figure 6.5: The theme ‘interdependence with primary care’ and its sub-themes.....	129
Figure 6.6: The theme ‘the versatility of the link worker role’ and its sub-themes.	136
Figure 6.7: The theme ‘resource limitations’ and its sub-themes.	140
Figure 6.8: The theme ‘data management to support work and evaluation’ and its sub-themes.....	144
Figure 6.9: The theme ‘discrepancies in knowledge and understanding’ and its sub-themes.	153
Figure 6.10: The theme ‘mismatch of expectations’ and its sub-themes.....	158
Figure 6.11: A map of the SP journey	163
Figure 6.12: A Venn diagram depicting five categories of SP referral options	164
Figure 7.1: The factors identified which impact the implementation and delivery of SP in practice presented against the domains of the RMIC (Valentijn, 2016)	168
Figure 7.2: Key mechanisms which support the implementation and delivery of SP	170
Figure 7.3: Key mechanisms which support the implementation and delivery of SP (a clear definition and shared understanding).....	171

Figure 7.4: The proposed definition of SP.....	172
Figure 7.5: The fundamental stages surrounding SP dependant on the model implemented	173
Figure 7.6: Key mechanisms which support the implementation and delivery of SP (supportive context)	186
Figure 7.7: Key mechanisms which support the implementation and delivery of SP (sufficient and secure funding)	193
Figure 7.8: Key mechanisms which support the implementation and delivery of SP (IT infrastructure)	197
Figure 7.9: Key mechanisms which support the implementation and delivery of SP (stakeholder 'buy-in')	204

Abbreviations

Abbreviation	Full term
A&E	Accident and emergency
ASSIA	Applied Social Sciences Index & Abstracts
BME	Black and minority ethnic
CCG	Clinical Commissioning Group
COPD	Chronic obstructive pulmonary disease
CORE-OM	Clinical Outcomes in Routine Evaluation-Outcome Measure
GAD	General anxiety disorder
GHQ	General Health Questionnaire
GP	General practitioner
HADS	Hospital Anxiety and Depression Scale
HMIC	Health Management Information Consortium
IT	Information technology
MRC	Medical Research Council
NESTA	National Endowment for Science, Technology, and the Arts
NHS	National Health Service
NICE	National Institute for Health and Care Excellence
PAM	Patient Activation Measure
PHQ	Patient Health Questionnaire
PRISMA	Preferred Reporting Items for Systematic Reviews and Meta-analyses
QoF	Quality and Outcome Framework
RCT	Randomised control trial
RMIC	Rainbow Model of Integrated Care
SDH	Social determinants of health
SNOMED CT	Systematized Nomenclature of Medicine Clinical Terms
SP	Social prescribing
SPSS	Statistical Package for Social Sciences
STP	Sustainable Transformation Plans
UK	United Kingdom
VCSE	Voluntary, community and social enterprise
WEMWBS	Warwick-Edinburgh Mental Wellbeing Scale
WHO	World Health Organisation
WSAS	Work and Social Adjustment Scale

Abstract

A current priority within UK policy is to promote partnership working between healthcare and the community sector to support the delivery of integrated and person-centred care, and to tackle the wider determinants of health. This represents a shift in focus from a curative to a preventative system. Social prescribing has been put forward to address this. Definitions, models, and understanding of social prescribing vary which leads to differences in the implementation of the concept. However, at its core, it enables healthcare professionals to refer patients with non-medical needs to non-medical sources of support, to improve their health and wellbeing. In some models of social prescribing a link worker is employed to facilitate this process. Social prescribing is increasingly present in policy and the media. However, much research reports barriers to the implementation of services in practice, and, despite some evidence of the effectiveness of individual services, there is insufficient evidence to support the wide-scale implementation of the concept. As social prescribing is gradually implemented across the UK, it is paramount that the concept is understood, including the roles of stakeholders and the barriers that services face.

A scoping review of the current literature was first conducted. Following this, the aim of the research was determined: to examine social prescribing in practice with a view to producing a framework of knowledge to progress understanding and implementation. A convergent parallel mixed-methods research design was adopted which was underpinned by a critical realist perspective and guided by the Rainbow Model of Integrated Care as the theoretical foundation. In study I secondary data from a social prescribing service were obtained for analysis to explore the underlying contributing factors to requiring a non-medical health intervention. Due to the poor quality of the data obtained, the planned quantitative analysis was not possible. However, the data highlighted the need for proper data collection and management.

In study II three stakeholder groups took part in semi-structured interviews: GPs (n = 18), link workers (n = 15), and service users (n= 18). Inductive thematic analysis was adopted to analyse interview data, after which themes were deductively mapped against the domains of the Rainbow Model of Integrated Care. Non-thematic data present in interviews were analysed categorically. Study II identified a range of barriers to social prescribing. However, when the findings of study I and II were combined it was apparent that, instead of a fixed list of barriers, there are a set of factors that influence social prescribing in practice which turn into barriers when not present. These were identified from the research findings, but it was noted that there are complex interrelationships between all factors and, therefore, they could not be considered individually. Instead, they were summarised as the following five mechanisms: a clear definition and shared understanding, supportive context, sufficient and secure funding, IT infrastructure, and stakeholder 'buy-in'. When considered at a broad level, these mechanisms suggest that social prescribing needs to be established as a reputable intervention with formal links to healthcare. In the discussion, a new definition of social prescribing, developed through the research, was also introduced.

This research contributes to the advancement of the evidence base and provides support to facilitate the implementation and delivery of social prescribing. Additionally, the limitations of this research, and the identified gaps in the evidence base, can inform future research into this area.

Chapter 1: Introduction

1.1 The Research Context

The idea that healthcare professionals can prescribe personalised non-pharmaceutical interventions is growing in popular culture; this is known as social prescribing (SP). News outlets have reported that General Practitioners (GPs) are offering arts and exercise as an alternative to pharmaceutical prescriptions (BBC News, 2018, Bostock 2018, Martin, 2018, Shaddick, 2019), and one article reported that the National Health Service (NHS) has begun prescribing “*boxing, bingo, and Bollywood dancing*” (Booth, 2018).

Whilst many examples of SP presented to the public tend to focus on arts and exercise-based prescriptions, SP is much broader than this. SP provides an opportunity to tackle the growing issues in healthcare by addressing the underlying contributory factors to poor health and improving integration between sectors (NHS England, 2014). It is advocated as a method of addressing the wider determinants of health outside of traditional healthcare by drawing on pre-existing services in the community. Arts and exercise programmes are a large part of this, however it can also be used as a means to address further issues such as housing (Farenden et al., 2015, Kimberlee, 2016), education (Steadman et al., 2017), isolation (Farenden et al., 2015, Healthy Dialogues, 2018), and benefits and finances (Farenden et al., 2015, Friedli et al., 2012, Grant et al., 2000).

There are multiple delivery models of SP in practice. Kimberlee (2015a) separated the concept into four groups: (1) signposting, (2) light, (3) medium, (4) holistic. These models increase in intensity from signposting, where a healthcare professional makes an informal suggestion of non-medical services which could benefit the individual, to holistic, in which a service user is referred to a link worker who makes a formal assessment of a service user’s needs and supports them to access services. SP link workers are also known as: ‘health trainers’, ‘referral facilitators’, ‘wellbeing coordinators’, ‘befrienders’, ‘link workers’, and other titles (Carnes et al., 2015, HM Government, 2018). The varied titles in use cause difficulty in the appraisal of the role (Bickerdike et al., 2017, Gillam and Levenson, 1999), so, in the current research it was considered practical to employ one term to describe this stakeholder group, thus they were referred to as ‘link workers’ irrespective of their job title. There are three key stakeholder groups involved in SP: GPs, link workers, and service users. Whilst various healthcare professionals are involved in SP in practice, it is typically GPs who offer them due to their gatekeeper role within healthcare. A prominent example of SP in practice is the Bromley-By-Bow Centre in East London (CentreForum, 2014). This service is based at a GP practice, and, therefore, is integrated within local healthcare provision. The service provides a holistic model of SP, working with some of London’s most deprived communities. The centre offers service users a range of support, such as healthy lifestyle and weight management advice, a

community gym, debt management support, benefit support, English courses, and skills development courses (Bromley by Bow Centre, n.d., Woolf, n.d.).

Owing to the broad factors that SP addresses, and the varied models of delivery in practice, SP is challenging to define. Despite the term having been in use since the 1960s (Shatin et al., 1967), there is currently no widely agreed definition of the concept (Polley and Dixon, 2016). The SP Network (SPN) published a definition of SP in their annual report: *“Enabling healthcare professionals to refer patients to a link worker, to co-design a non-medical social prescription to improve their health and wellbeing”* (Polley and Dixon, 2016: 19). Moreover, the NHS released the following definition: *“SP enables all local agencies to refer people to a ‘SP link worker’ to connect them into community-based support”* (NHS England, 2019e: 1). However, both definitions encompass multiple stages of the SP process and they do not clarify when the social prescription occurs. This lack of specificity is not uncommon. Mann et al. (2017: 632) highlights this issue: *‘SP’ is used to refer to “either the process of healthcare professionals (e.g., a general practitioner) prescribing time with a link worker, or both the process of prescribing a link worker and the subsequent community group/activity that is recommended to the service user”*. Mann et al. (2017) did not offer any insight into how the concept could be clarified. Consequently, investigation is required to understand at which stage of the ‘journey’ the social prescription occurs, and thus produce a definition that is reflective of practice.

Regardless of the uncertainty surrounding its definition, SP is becoming increasingly prominent in policy. Of particular significance is The Five Year Forward View (NHS England, 2014) which sought to integrate GPs, hospitals, and social care in an effort to move towards an integrated and more locally delivered care system. The General Practice Forward View (NHS England, 2016b) also called for more integration across the wider health and social care sectors and highlighted the important role SP plays in achieving this. The report detailed the intention of NHS England to appoint a new National Champion for SP to support an increase in the availability of services on a national level. Further addressing the need for integrated sectors, the Releasing Capacity in General Practice (NHS England, 2016c) Report named SP as one of the 10 high impact actions to address capacity issues in general practice. A major success for SP came when the influential report A Connected Society was released (HM Government, 2018). In this, plans to tackle the impact of loneliness on health by integrating the public, private, and voluntary sector were published. They included the intention to expand the provision of SP across the UK by 2023 through the implementation of government supported SP connector schemes. This was in response to Tackling Loneliness: A Community Action Plan published by the Royal College of General Practitioners (2018b). In this, provision for all GP surgeries to have access to SP services was requested. Building on this, SP was noted as a way to increase the provision of personalised care in the Long-Term Plan (NHS England, 2019c).

The need for intervention to address the wider determinants of health (Dahlgren and Whitehead, 1991) is permeated through policy and the media. However, currently, despite policy claims of value, and some evidence for the effectiveness of individual services, there is insufficient evidence to support the wide scale implementation of the concept (Bickerdike et al., 2017, Centre for Reviews and Dissemination, 2015, Kinsella, 2015, Mossabir et al., 2015, Rempel et al., 2017, South et al., 2008). Much research into SP concludes by making an argument for the need to examine, and better understand SP. This can be achieved through the exploration of stakeholder perspectives. Pre-existing research typically focusses on a single stakeholder group (Bromley by Bow Centre, 2016b) or the combination of two groups (Bertotti et al., 2015), research rarely considers the concept from multiple perspectives.

To better understand SP, the underlying contributory factors to an individual requiring non-medical intervention also need to be examined. This will highlight the importance of SP in healthcare and ensure the appropriate targeting of services. Much research presents descriptive information of the service user population (Carnes et al., 2017, Dayson et al., 2016, Dayson and Bennett, 2016a, Dayson and Leather, 2018, Healthy Dialogues, 2018, Kimberlee, 2016, Liles and Darnton, 2017), yet, no known research has determined the contributory factors which lead an individual to require a non-medical intervention. To achieve this a deeper level of analysis is necessary.

1.2 Research Aim and Objectives

The aim of this research is to examine SP in practice with a view to producing a framework of knowledge to progress understanding and implementation. This was addressed through the following research objectives:

1. To explore and quantify the underlying contributing factors to requiring a non-medical health intervention within a single service user population.
2. To examine stakeholders' perceptions of SP in the context of healthcare.
3. To understand the role of primary care in SP.
4. To investigate the role of SP link workers.
5. To consider the use of language surrounding SP.
6. To identify factors which hinder the implementation of SP services.

1.3 Research Design

To facilitate the exploration of service user data and multiple perspectives of SP, a critical realist philosophical position was adopted. A convergent parallel mixed methods research design was

utilised to address the research objectives. The quantitative element (Study I) of this design analysed pre-existing or secondary service user data (n=2,155). The qualitative element (Study II) explored key stakeholders' (GPs n=18, link workers n=15, and service users n=18) perspectives of SP using semi-structured interviews.

1.4 Thesis Outline

This introductory chapter has detailed the research context, introduced the research problem and the aim and objectives, has detailed the research design adopted to address these, and has provided an outline of the thesis. In chapter 2, SP is presented as a model of integrated care to address current demands on healthcare services. The policy context for SP is discussed and the Rainbow Model of Integrated Care (RMIC) is introduced as the theoretical foundation for this research. In chapter 3, the process of conducting a scoping review of the current literature is detailed and the findings are discussed. Chapter 4 introduces the philosophical position, methodology, and methods adopted, and the aim and objectives are outlined. The findings from each study are presented in chapters 5 and 6. Next, chapter 7 discusses the findings presented in the preceding chapters; it draws the findings from both studies together in consideration of the research's aim and objectives. The limitations of the research are also discussed. Finally, chapter 8 presents the contribution to knowledge, implications of the research, and recommendations for future research before concluding the thesis.

Chapter 2: Social Prescribing

2.1 Introduction

First, this chapter discusses the social determinants of health (SDH). Following this, integrated care is presented to address the increasing demands on healthcare, and then SP is introduced as a form of integrated care. The parallels between self-management and SP are considered, before the models of SP in practice are detailed, and the policy context for SP is discussed. Next, the chapter considers the issues with conceptualising SP, and explores how approaches from other disciplines can be applied. Finally, it presents the RMIC as a theoretical foundation for SP.

2.2 Determinants of Health

Access to good healthcare is important. However, it has been found to account for as little as 10% of a population's health and wellbeing (McGinnis et al., 2002, Siegel et al., 2016), with the rest being shaped by socio-economic factors such as individual behaviours, environment, and social circumstances, referred to as determinants of health (Buck et al., 2018, Dahlgren and Whitehead, 1991). Since the introduction of the NHS, the population has changed vastly with people living increasingly complex modern lives (Burkitt et al., 2018). Consequently, the NHS's ability to provide high quality care is being tested by growing population demands (Wildman et al., 2019b). A rising proportion of the UK population live with long-term conditions (George and Martin, 2016, Public Health England, 2018), and the NHS spends considerable time treating conditions that are a consequence of the SDH (Braveman and Gottlieb, 2014, Pye, 2018).

Frameworks are employed to aid in the identification of the social, environmental, and individual lifestyle factors which impact population health and well-being. A prominent example of such a framework is Dahlgren and Whitehead's model of the SDH, displayed in Figure 2.1 (Canadian Council on Social Determinants of Health, 2015, Dahlgren and Whitehead, 1991, Smailes and Street, 2011, Wistow et al., 2015). In this, determinants are represented in a layered diagram centred around core idiosyncratic characteristics consisting of unmodifiable factors such as age, sex, and genetic (Bartley, 2004). Surrounding this are layers of modifiable factors, such as social and community networks, the individual's living and working conditions, and environmental and cultural influences. Although the model is largely descriptive (Cropper et al., 2007), it maintains the importance of the wider factors (the outer layers), as, although individual behaviour and predetermined factors such as age (the inner layer) have a large impact on health outcomes, these cannot be understood independent from the wider contexts, such as living and working conditions, government policy, or cultural and environmental conditions.

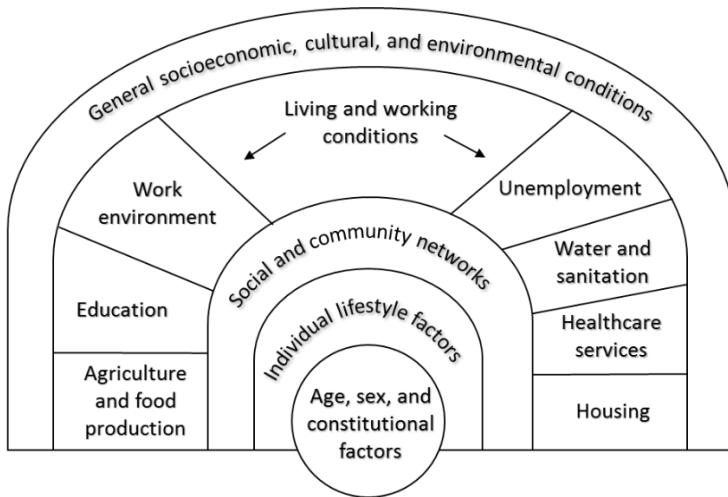


Figure 2.1: The main determinants of health (Dahlgren and Whitehead, 1991)

There are other models that portray the SDH, for example the World Health Organisation (WHO) conceptual model (World Health Organization, 2010). Unlike Dahlgren and Whitehead's, this model differentiates between the social factors that influence health, and the social processes that determine their unequal distribution. It identifies factors which create health inequities, including the employment, housing, education, health, and elements of cultural and societal value (World Health Organization, 2010). The model also incorporates ethnicity and racism as factors that influence socio-economic position. Whilst the WHO model has become the standard in policy (Martínez-García et al., 2018), Dahlgren and Whitehead's is the most prominent (Canadian Council on Social Determinants of Health, 2015, Smailes and Street, 2011, Wistow et al., 2015), and is used widely in health related research. This is likely due to the simplistic design of Dahlgren and Whitehead's model making it an effective illustration of the determinants (NHS Education for Scotland). Whereas, as the WHO model also identifies interactions between determinants, is it more complex (Canadian Council on Social Determinants of Health, 2015). Another model which recognises interactions between factors is Brunner and Marmot's (2006) which identifies the links between social structures and health outcomes. This model does however focus on individual behaviour and is largely applicable to cardiovascular illness, unlike the WHO and Dahlgren and Whitehead's models which offer a holistic and intersectional approach. Ultimately, the comprehensive explanatory focus of Dahlgren and Whitehead's model makes it suitable for this research, as the broader factors which impact health can be considered.

The inner layer of Dahlgren and Whitehead's (1991) model, age, sex, and constitutional factors, refers to predetermined factors that cannot be altered. Currently, healthcare is facing challenges related to demographic changes (Iacobucci, 2017). The UK has an ageing population (Office for National Statistics, 2017). There are currently more than three million people in England over the

age of 80 years old, and this is anticipated to nearly double by 2030, reaching eight million by 2050 (Thompson, 2015). Whilst this dramatic increase in life expectancy is an example of the success of the NHS and modern medicine, it has led to concerns regarding the population's healthcare needs. As people age, they are more likely to experience multiple co-morbidities and, as a consequence of the growing elderly population, the number of people living with multiple chronic conditions is increasing rapidly (Barnett et al., 2012, Department of Health, 2014a). In England the proportion of people with four or more ailments are predicted to double between 2015 and 2035 (Kingston et al., 2018). These trends put an increased strain on healthcare resources. It is estimated that the average cost of providing hospital and community care for someone older than 84 is approximately three times greater than for a person aged 65 to 74 (Parliament UK, 2015).

Further fixed factors have an impact on an individual's health, such as gender, ethnicity, and genetics. It is broadly understood that men and women have differing health needs through their life course (Regitz-Zagrosek, 2012). Whilst women have an increased life expectancy compared to men (The Office for National Statistics, 2015), they experience greater rates of morbidity and a diminished quality of life in later years (Rieker and Bird, 2005). Men have an increased risk of various morbidities, including cardiovascular disease, yet women experience a greater number of strokes than men. Although this can be owed to the greater incidence of strokes with increasing age (Bots et al., 2017). Other constitutional factors, such as genetics, also impact upon incidence of illness, which can be considered in relation to race and ethnicity. There has been much debate about whether these genetic factors contribute to inequalities in ill health, particularly concerning common chronic conditions, such as diabetes (Stanner, 2001). Whilst some researchers argue that genetic variation between groups leads to health differences experienced, in a review of the evidence of ethnic inequalities in health, Davey-Smith et al. (2000) argued that there is a greater amount of genetic variation within ethnic groups than between them. Therefore, genetic differences alone cannot adequately explain health differences (Rieker and Bird, 2005, Vlassoff, 2007). Despite the evidence and recognition of inherent risk factors for health outcomes, they are insufficient by themselves to explain or predict an individual's health. There is increasingly more evidence to suggest that other social and economic factors, possibly amenable to intervention, are involved, such as lifestyle factors.

The next layer of Dahlgren and Whitehead's (1991) model, individual lifestyle factors, refers to the habits, attitudes, beliefs, and moral standards held by an individual. Lifestyle factors have a considerable impact on health outcomes and, therefore, healthcare services. Risky health behaviours, such as smoking, excess alcohol consumption, and obesity are major contributors to the total burden of disease in Europe (World Health Organization, 2009). These lifestyle factors are

interlinked with the living and working conditions layer of Dahlgren and Whitehead's (1991) model. For example, the presence of risky behaviours correlates with education. Those with higher levels of education are less likely to engage in risky health behaviours (Huijts et al., 2017, Zimmerman et al., 2015), and are more likely to have healthy behaviours related to diet and exercise (Andrews et al., 2017, Janßen et al., 2012). Education also has a significant impact on an individual's employment prospects (OECD, 2012). In the UK, 84.8% of those with a tertiary education are in employment compared to just 61.6% of those without upper secondary education (OECD, 2017). Employment does not guarantee good health. The impact of work stress on the incidence of cardiovascular disease has been researched widely, with some studies observing a twofold increased risk of cardiovascular disease in individuals with high work stress compared to non-exposed individuals (Dimsdale, 2008, Kivimäki et al., 2002, Siegrist and Marmot, 2006). Nonetheless, employment status impacts an individual's financial situation; there is extensive evidence to support a strong positive correlation between socioeconomic status and health.

Those with a higher income tend to experience better health compared to those with a low income (Ettner, 1996, Kawachi and Kennedy, 1999, Rowlingson, 2011, Wagstaff and Van Doorslaer, 2000). This relationship has been observed for a variety of health outcomes, including mortality, chronic illness, common colds, mobility issues, obesity, and self-reported health status (Larrimore, 2011). The impact that income has on health outcomes is partly attributable to living conditions. Poor housing could lead to a range of health concerns, including respiratory issues, illness and deaths from temperature extremes, injuries or accidents in the home, and depression and anxiety (Homeless Link, 2014, POST, 2011, World Health Organisation, 2010). Research has shown that young and middle aged individuals living in the most deprived areas have rates of multi-morbidity equivalent to those of individuals 10 to 15 years older who live in the most affluent areas (Barnett et al., 2012).

Like the physical situation which surrounds a person, social and community networks can have a significant impact on health (Dahlgren and Whitehead, 1991). Studies have shown that individuals with multiple varied social connections live longer (Berkman and Glass, 2000, House et al., 1988, Seeman, 1996). Those with strong social relationships have half the risk of mortality compared to those who do not (Holt-Lunstad et al., 2010, Steptoe et al., 2013). Those who are more socially integrated also experience lower levels of cognitive decline with ageing (Giles et al., 2012, Holtzman et al., 2004, Wilson et al., 2007, Zunzunegui et al., 2003) and lower incidence of dementia (Crooks et al., 2008, Fratiglioni et al., 2004). A reduced incidence of stroke is also seen (Rutledge et al., 2008), and some evidence points towards a reduced risk of cancer mortality and recurrence (Helgeson et al., 1998, Kroenke et al., 2006, Kroenke et al., 2017, Reynolds et al., 1994).

An area of social and community networks which has received a considerable amount of attention in recent years is isolation. Estimates of the prevalence of loneliness tend to focus on the elderly population as this age group is thought to be most at risk. Over half (51%) of people in the UK aged 75 and over live alone (Dunstan, 2012), 17% of the elderly population have contact with their family or friends less than once a week, and 11% have contact less than once a month (Victor, 2003). The Office for National Statistics (2015) found that, compared to the working age population, those aged over 80 have a higher average loneliness rating (21% vs 33%). They are also twice as likely (29.2%) to report feeling lonely than those of working age (14.8%). Loneliness is a strong predictor for depression (Cacioppo et al., 2010, Cacioppo et al., 2006, Heikkinen and Kauppinen, 2004, Heinrich and Gullone, 2006), and, despite the prevalence of loneliness varying with age, its association with depression is consistent across all age groups (Victor and Yang, 2012).

Currently, primary and secondary care are poorly integrated and inappropriately structured to deal with the increasing demands on social and health care resulting from the influences included in Dahlgren and Whitehead's model (1991). This has led to acute care becoming overburdened with often preventable illness, and a disproportionate level of spending on treating end-stage disease. Evidence suggests that supporting individuals to care for themselves and involving patients in decisions affecting their health is advantageous, particularly in relation to the increasing rates of primary care consultations and healthcare pressures (Bell et al., 2016). In a review of the NHS, the provision of local preventative services to improve mental wellbeing and to tackle the wider determinants of health was considered a priority (Department of Health, 2008). This is at juxtaposition to the traditional focus of the NHS as a 'disease detection and treatment' service (Montgomery et al., 2017). The current system of 'treatment of disease' rather than 'health maintenance' is largely driven by non-medical factors which could be addressed outside of traditional healthcare or tackled before they create ill health. This thinking represents a shift in healthcare from a curative system to a preventative one. To address the SDH the NHS needs to move towards an integrated system, between both healthcare services and the VCSE sector, and other health and wellbeing providers (Maruthappu, 2016). This will support action to address social issues that are beyond the reach of services provided in the NHS (Marmot et al., 2010). The Five Year Forward View (NHS England, 2014) sought to integrate GPs, hospitals, and social care in an effort to move towards an integrated and more locally delivered care system. This, in-turn could support the development of an integrated, holistic, and preventative approach to healthcare which considers the involvement of the community to address the evermore complex demands on healthcare and to prevent future ill-health.

2.3 Person-Centred Care

To address the SDH personalised care is required as each individual has a different experience of the determinants (The Health Foundation, 2016), and, therefore, their care needs to be tailored to their needs (McFarland and MacDonald, 2019). There is no universally agreed-upon definition of person-centred care (Byrne et al., 2020, Scholl et al., 2014). This likely reflects the complexity of person-centredness in practice, as well as different approaches between services (Louw et al., 2017). However, generally person-centred care offers service users more choice and control by providing care that is appropriate to the individual's needs (RCGP, 2020). It empowers individuals to take an active role in managing their own health and well-being, whilst working alongside healthcare professionals as equal partners. The approach requires healthcare services to work in partnership to deliver care responsive to people's individual abilities, preferences, lifestyles, and goals (de Silva, 2014). Consequently, to deliver person-centred care there needs to be integration between sectors to provide continuous and comprehensive care.

2.4 Integrated Care

Integrated care is widely perceived as offering a potential solution to some of the challenges facing healthcare provision (Baxter et al., 2018b, Kodner, 2009, NHS England, 2019a). It is invoked as an approach to develop more coordinated and cost-effective care in the context of increasing healthcare demands due to factors such as the SDH (Araujo de Carvalho et al., 2017, Goodwin et al., 2012, Kodner, 2009). However, there is no widely agreed definition of 'integrated care' (Baxter et al., 2018a, Goodwin, 2016). The identification of a definition is challenging as integrated care is also termed 'coordinated care', 'collaborative care', 'managed care', 'continuity care', or 'comprehensive care' in the literature (Kodner, 2009, WHO, 2016b); these terms are used interchangeably and in widely different contexts (Bickerstaffe, 2016, Exworthy et al., 2017). Moreover, 'integrated care' is also used as an umbrella term to describe a myriad of initiatives with varying aims and settings, creating further challenges for defining the concept (Ewing et al., 2016, Goddard and Mason, 2017, Leijten et al., 2018). The diversity in definitions and terms used for integrated care likely result from the different purposes, views, and expectations various stakeholders ascribe to the term (Goodwin, 2016, WHO, 2016a), and the diverse nature of integrated care itself (RAND Europe, 2012).

Despite variation, the principal attributes of integrated care can be identified. These are, to bring together disconnected aspects of care, and to deliver care, for example providing assistance or treatment to people in need (Goodwin, 2016). Within this thesis, integrated care is defined as an approach to healthcare which strives to improve the quality and efficiency of care for individuals by working with the service user, and, by coordinating across different levels and sites within and beyond the healthcare sector (Contandriopoulos et al., 2003, Goodwin, 2016, Leutz, 1999, Lewis et

al., 2010, National Voices, 2013). Integrated care can also be defined with reference to the dimensions along which it occurs (Goddard and Mason, 2017); these are horizontal and vertical integration (Exworthy et al., 2017, Valentijn et al., 2013). Horizontal integration brings together various care providers, and typically focusses on the creation of multi-disciplinary teams that support a specific group (Goodwin, 2016). Whereas vertical integration focusses on integration between providers at different points in the healthcare pathway (Baxter et al., 2018b, Goddard and Mason, 2017). Vertical integration is disease-focused; it concentrates on the idea that illness is typically treated concurrently at different levels across healthcare services. Whereas horizontal integration takes a holistic view; it addresses health through collaboration across different healthcare services and care providers (Goodwin and Smith, 2011, Valentijn et al., 2013). To address the existing fragmentation in healthcare delivery, and support the delivery of coordinated care to manage the SDH, both horizontal and vertical integration are needed (Pescheny, 2019, Shaw et al., 2011).

Whilst much policy supports integrated care (NHS England, 2019c, NHS England et al., 2015), discussed further in section 2.6, links between healthcare and the VCSE sector are typically lacking in the UK (Charles et al., 2018, South et al., 2008). Research has found that there are major cultural, operational, and territorial barriers to integrated care (Goodwin, 2011, Ham and Smith, 2010, Harlock et al., 2019), such as strained relationships between different professional groups, a lack of leadership, and short-term funding for the voluntary, community and social enterprise (VCSE) sector (Charles et al., 2018, Popay et al., 2007b); these must be addressed if integrated care is to become a reality (Ham et al., 2011). Without integrated services, GPs have limited referral options for patients that present with social issues or mental health concerns (Smith et al., 2019a), and, consequently, may respond with medical interventions or reassurance rather than addressing the root cause of the issue (Brandling and House, 2009, Popay et al., 2007b, Wilson and Read, 2001). Research has identified that some GPs seldom refer their patients to VCSE services due to limited information (Popay et al., 2007b). Also, that some GPs prescribe pharmaceuticals, despite thinking that other options may be more effective, due to a lack of alternatives (Maughan et al., 2016, Popay et al., 2007b). Due to time pressures and limited resources, GPs can be reluctant to probe for social causes of ill health (Butalid et al., 2014, Kilgore et al., 2008, Mossabir et al., 2015, Sharp et al., 2018a). However, one study reported that 9 out of ten GPs believed their patients would benefit from support for social issues (Langford et al., 2013).

One method of addressing the disparity between the social needs of patients and the resources available in healthcare, is for healthcare services to work in partnership with VCSE sectors (horizontal integration) (Aveling et al., 2017, Maruthappu, 2016). Healthcare has long had links with

the VCSE sector, but links are not consistent between practices (Curry et al., 2011). Expanding the scope of referral options in healthcare to include those which address wider social issues, such as finance, housing, or exercise could reduce demand on services, and better meet the needs of patients (NHS England, 2016b, Pescheny et al., 2018c). Though, as discussed, there are issues with integration (Goodwin, 2011, Ham and Smith, 2010, Harlock et al., 2019), consequently, a structured and funded approach to such integration is required. SP is an initiative that has been gradually implemented in the UK in response to this need for integration to address the SDH (Dayson, 2017).

2.5 Defining Social Prescribing

Since the 1960s the term 'SP' has been used to describe a vast range of services and interventions that can provide benefit to individuals with poor health outcomes that are mostly attributable to socioeconomic factors (Shatin et al., 1967). Although the term is not new, the concept in practice has developed significantly in recent years (The King's Fund, 2017). SP refers to services that aim to tackle the growing issues in healthcare by addressing the underlying contributory factors to poor health and to improve integration between sectors (NHS England, 2014). It also refers to services that link individuals with sources of support outside of traditional healthcare to improve their health and wellbeing (Carnes et al., 2017). SP requires both horizontal and vertical integration to ensure linked-up care between services within healthcare, and those in the community. Like integrated care (Baxter et al., 2018a, Goodwin, 2016), there is currently no widely agreed definition of SP, with 56 variations being found in one survey (Carnes et al., 2017, Polley and Dixon, 2016). This is reflective of the fact that there is no single model of SP; the aims, referral routes, delivery models, and level of support offered vary between services (Bertotti et al., 2018, Husk et al., 2016, Woodall et al., 2018). Consequently it is challenging to define (Friedli et al., 2009). A clear and concise definition is lacking (Polley and Dixon, 2016), and, therefore, the application of the concept is inconsistent (Tierney et al., 2019).

To conceptualise the different SP services in practice, Kimberlee (2015a) broke the concept into four models: signposting, light, medium, and holistic. These four models will be discussed in detail in section 2.5.2. Despite there being examples of all models in practice, holistic SP services based in general practice seem to be most common in the UK (Carnes et al., 2017, Dayson, 2017); this is termed holistic SP (Kimberlee, 2015a). Link workers are also known as: 'health trainers', referral facilitators', 'wellbeing coordinators', 'befrienders', and 'navigators' (British Medical Association, 2019, Carnes et al., 2015, HM Government, 2018). The varied titles in use cause difficulty in the appraisal of the role (Bickerdike et al., 2017, Gillam and Levenson, 1999). Consequently, it was considered practical to employ one term in this thesis to describe this group, thus they were

referred to as link workers irrespective of their job title. Their role is discussed in more detail in section 3.2.5.1.

The holistic SP journey begins with a service user engaging with a healthcare service, typically general practice. During the consultation, the healthcare professional identifies that the service user could benefit from a non-pharmaceutical intervention such as SP. This might be instead of traditional healthcare, or alongside such care to support the needs of the service user in a more holistic manner (Bickerdike et al., 2017). The healthcare professional refers the service user to a link worker who may be attached to the practice, or to an external service. Following this, the link worker will arrange an appointment with the service user (typically face-to-face) to discuss their non-medical needs, and to work in collaboration to identify appropriate referrals or sources of support. Services into which patients can be referred are extensive; they are typically provided by the VCSE sector and available locally. For example, activities that involve physical activity, such as gyms and walking groups can be referred into. Also, those that address wider economic and social issues such as services for welfare, debt, and housing. Furthermore, services aimed at people with specific conditions, for example diabetes, can also be accessed through SP (Moffatt et al., 2017). After referral, the service user attends the referred to services. In some services they will receive ongoing support from the link worker.

The variation between the definitions of SP (Carnes et al., 2017, Polley and Dixon, 2016), the models in practice (Kimberlee, 2015a), and the terms used to describe the link worker role (British Medical Association, 2019, Carnes et al., 2015, HM Government, 2018) create challenges in the understanding of the concept, and the comparison and evaluation of services. This could be a barrier to effective implementation, access, and engagement with SP. Given the recent popularity of SP, it is surprising that the concept is not clearly defined. Whilst the increased usage of the term SP is recent (The King's Fund, 2017), the concept of providing non-medical care to address the SDH is not (Shatin et al., 1967). To support understanding of SP, parallels with other, more developed, concepts can be drawn. For example, the concept of self-management shares similarities with SP.

2.5.1 Parallels with Self-Management

SP is an emerging modern concept (The King's Fund, 2017) and its parameters are not yet fully understood (Bertotti et al., 2018, Husk et al., 2016, Woodall et al., 2018). To gain a better understanding of SP we can draw parallels between it and the more developed concept of self-management (Lorig and Holman, 2003). Self-management means different things to different people (Corben and Rosen, 2005), but, generally, it refers to the day-to-day management of chronic conditions by individuals throughout the course of an illness to maintain the best quality of life (Clark

et al., 1991, Grady and Gough, 2014, Parsons et al., 2010). At its most basic level, self-management views the maintenance of health and the management of illness as the responsibility of the individual (Ryan and Sawin, 2010, Starfield et al., 2008). This is recognised as crucial for addressing the challenges associated with chronic disease (Galson, 2009, Mills et al., 2016), and is thought to improve self-efficacy, health status, and potentially reduce healthcare costs (Brady et al., 2013, Brownson et al., 2009).

Self-management is often used interchangeably with the terms 'self-care' and 'patient education', however, self-management has progressed beyond the practice of simply providing information to increase patient knowledge (Grady and Gough, 2014). The provision of effective policies and programs to facilitate self-management is recognised as crucial to support individuals (British Columbia Ministry of Health, 2011, Galson, 2009). This is termed self-management support. This is healthcare professionals, teams, and services (within and outside the NHS) working in ways to support individuals with long-term conditions to develop the skills, knowledge, and confidence required to successfully manage their health (De longh et al., 2015). Like SP, self-management support requires the integration of healthcare systems and community-based services (Mills et al., 2016), and primary care is typically the first point of contact in the process (AIHW, 2016). Also, in self-management support, healthcare professionals tailor their care based on an individual's needs and preferences, and they take into account inequalities and accessibility barriers (NHS England, 2020d); this is similar to the approach taken by the link workers in SP.

Despite similarities between the two concepts, it has been long recognised that self-management should form an important part of any model of care for those living with long-term conditions, whereas SP is a relatively new concept (Barker et al., 2018, Coleman et al., 2009). This is perhaps due to the fact that self-management deals with clinical conditions (e.g., diabetes, COPD, and arthritis), like much of the healthcare service, whereas, whilst SP can be applied to clinical conditions, it also encompasses the wider SDH (e.g., housing, employment, and social life) which are not typically addressed in healthcare services (Dahlgren and Whitehead, 1991). Both concepts require horizontal and vertical forms of integration to be successful, so, by examining self-management, we can envisage how SP might be incorporated into healthcare services. Although, an argument for the use of SP is to reduce the usage of healthcare services. Consequently, care needs to be made to not medicalise SP when comparing it to self-management.

2.5.2 Models of Social Prescribing

The aims and delivery models of different SP services differ hugely (Husk et al., 2016). SP services vary in areas such as their referral route (self-referral or referral from a health professional or social care worker), service delivery type (telephone support or face-to-face), and the level of support

provided (one off sessions or multiple follow-ups) (Bertotti et al., 2018, Husk et al., 2016, Woodall et al., 2018). Consequently, the concept is challenging to encompass within a singular definition, and further depth is required to identify models within the concept (Husk et al., 2019). To differentiate between approaches, Kimberlee (2015a) separated the concept into the following four sub-groups which reflect models of SP in practice: signposting, light, medium, and holistic. These terms expand the definition, allowing for better comparison between services within each group. Each model of SP is described, and an example is offered in Table 2.1 **Error! Reference source not found.**

<i>Model of SP</i>	<i>Description and example</i>
Signposting	<p>Description: Signposting is a common approach cutting across all models of SP (NHS and England, 2016). This directs users to appropriate pre-existing resources which are likely to help meet their wellbeing needs (Kimberlee, 2013). Typically, in signposting, a service user is provided with the contact information of a service which will benefit them, the responsibility of contacting the organisation is with the service user. Healthcare professionals can signpost patients directly towards services, as identified in the concept analysis, or service users can access a SP directory, either online or through a signposting service.</p> <p>Example: In Health Exchange Birmingham, using an online portal, patients can refer themselves to appropriate non-medical interventions (Health Exchange, 2017).</p>
Light	<p>Description: Patients are referred directly to a specific programme to address a specific need, or to encourage a patient to reach a specific objective (Kimberlee, 2015a). A SP light referral is usually given by a primary health care professional in the context of a consultation. The referred service is also typically based in healthcare, unlike many other SP referrals which are grounded in the VCSE sector.</p> <p>Example: The NHS smoking cessation service (NHS, 2020)</p>
Medium	<p>Description: Like SP light, this model addresses a specific need, however, the referral is made by a link worker who works within the VCSE sector. The service has a clear geographical remit and is the product of a partnership between the VCSE sector and primary healthcare. The service may have a permanent or regular presence at a primary care practice. The link worker makes a formal assessment of the issue the service user was referred for and provides appropriate signposting options (Kimberlee, 2013, Kimberlee, 2015a, Steadman et al., 2017).</p> <p>Example: The South Yorkshire Housing Association (SYHA) SP service addressed isolation within the community (SYHA, 2020)</p>
Holistic	<p>Description: The most comprehensive and flexible model of SP. Services are typically co-designed by VCSE organisations and primary healthcare, or Clinical Commissioning Groups (CCGs). Services aim to become an integral part of GP practices. GPs and other healthcare professionals can make a direct referral to an external SP organisation, like a medical referral, using a clear pathway, such as a referral form, or a phone call. The organisation assigns a link worker to each service user who then assesses a service user's needs. The model assesses and supports service users in a holistic manner; the initial referral reason will be addressed, but consideration will also be given to their wider needs. The link worker will have a good working knowledge of supportive organisations in the local area and may also have access to a directory. Instead of the service user simply being signposted to appropriate support, they are supported to access and attend interventions. The SP service will usually provide the service user with a point of contact in the organisation in case there are any issues, and they will follow up with the service user at regular intervals (Kimberlee, 2015a).</p> <p>Example: The holistic model of SP has also been termed the 'Bromley by Bow Model' after a significant holistic service in the UK (Kimberlee, 2013, Steadman et al., 2017).</p>

Table 2.1: Descriptions and examples of the models of SP offered by Kimberlee (2015a)

In both SP medium and holistic, the link worker role is included. This is a new role in healthcare that has developed in response to the increased uptake of SP in the UK. However, the infancy of the position, and the adaptive nature of their work has meant that a clear understanding of their role is lacking. This is due to discrepancies in the role between SP services based upon factors such as whether the link worker is voluntary or paid, the amount of funding the service receives, and the model of SP in use (Bickerdike et al., 2017, Natural England, 2017). For example, the model of SP implemented determines the amount of time a link worker spends with each service user (Brandling and House, 2007, Kimberlee, 2015a, Polley et al., 2017c). This can vary between a single point of contact in some medium models (Dayson and Bennett, 2016a), to multiple follow ups in holistic models (Bromley by Bow Centre, 2016a).

The lack of clarity surrounding the link worker role is evidenced by the multiple terms employed to describe their role (British Medical Association, 2019, Carnes et al., 2015, HM Government, 2018, Woodall et al., 2018), and the varying job descriptions presented by employers (Bromley by Bow Centre, 2018, HM Government, 2018). Yet, commonly link workers are cited as important to help service users address the wider determinants of health, offer a holistic approach to healthcare, and act as a link to support in the community (British Medical Association, 2019, Bromley by Bow Centre, 2018, NHS England, 2019d). Moreover, whilst there are no specific requirements for the role (Keenaghan et al., 2012), it is common for link workers to have some experience working as a social worker or as another type of healthcare professional. Generally, services tend to ask that applicants have experience of working in person-centred services, good communication skills, a high level of empathy (Bromley by Bow Centre, 2018), and sufficient emotional and mental resilience (Farenden et al., 2015). The various titles used to denote the link worker position, and the difference between the practical elements of the position cause difficulty in the evaluation of the role as it is challenging to draw comparisons between the role in different services (Bickerdike et al., 2017, Gillam and Levenson, 1999).

Dayson (2017) argued that, whilst Kimberlee's (2015a) models of SP encompass the broad range of services in practice, as SP begins to become part of healthcare, most services could be described as holistic; therefore, there is a need to further distinguish between holistic approaches. Consequently, Dayson introduced the concept of SP 'plus' to set apart the most extensive and embedded models of SP. SP 'plus' is not yet fully developed, so a clear understanding of its remit is not yet possible, although Dayson identified four key features of the concept: (1) broad geographic coverage, (2) multiple clearly delineated referral pathways from a variety of health settings, (3) a range of SP specific services and activities are available, (4) significant long-term investment of strategic funds across multiple service areas. However, it seems that SP 'plus' is not an alternative model; instead, it

is the gold standard of holistic SP. For example, the Bromley-By-Bow service (Bromley by Bow Centre, 2016a) could be considered an example of SP 'plus', however, it is also an example of successful SP holistic. Instead of further dividing the models proposed by Kimberlee (2015a), 'plus' models should be seen as examples of good practice that every holistic model should strive towards.

The separation of SP into the four models proposed by Kimberlee allows for the comparison and evaluation of services within each model, however it does not address the need for a succinct definition for use in policy and practice. As discussed in section 2.5, the separation of the act of the healthcare professional making a referral to a SP service, the act of the link worker performing an assessment, and the subsequent interventions, is still not distinguished. Similar to Kimberlee (2015a), the SP Network (SPN) also presented delivery models of SP (Polley and Dixon, 2016). Their review of 400 SP projects resulted in the identification of six models: (1) GP to practice-based SP (link person) to community, (2) GP to community-based SP (link worker), (3) GP direct to community activity, (4) GP to community-type activities in GP practice, (5) GP in centre to other services in same centre, (6) care coordinator or key worker to activities. Whilst the final model identified separates the act of a link worker performing an assessment, unlike Kimberlee's models, it is thought to be another delivery model of SP, rather than a separate process. Instead of distinguishing between different delivery models of SP, the delivery models proposed by the SP Network identify the referral pathways options in SP, and, whilst this clarifies the processes involved, it does not provide insight into the different levels of intensity. Moreover, these referral pathways contradict the SP Network definition discussed in section 3.2.5.2, as their definition states that SP is a GP referring a service user to a link worker, thus omitting all other referral pathways.

Whilst the three approaches to the models of SP discussed in this section vary, they all provide insight into different aspects of SP. The SPN models (Polley and Dixon, 2016) describe referral pathways, Dayson's (2017) SP 'plus' model outlines a model for all holistic services to aspire to, and the models described by Kimberlee (2015a) reflect the different levels of intensity in practice. The definition of SP is broad and encompasses multiple stages, and it is therefore useful to break the concept down. Consequently, as Kimberlee's (2015a) models aid the comparison of services within each model, they will be used to understand the literature throughout this thesis.

2.6 Policy Context for Social Prescribing

SP and similar approaches have been employed in healthcare for many years, with some services dating back to the 1990s (The King's Fund, 2017). Interest in, and support for the concept has increased in the past decade. Particularly with the increasing focus on wellbeing in healthcare. Government initiatives, policies, and guidelines have created a climate which supports the

development of SP initiatives. Table 2.2 lists some of these relevant documents and details key points concerning SP. This policy is discussed further in the following sections.

<i>Document</i>	<i>Key points relating to SP</i>
Saving Lives: Our Healthier Nation (Department of Health, 1999)	Advocated for health promotion in healthcare by recommending that existing community support organisations in the VCSE sector are linked with primary health care, to address social factors and to help mitigate their impact on primary care.
Choosing Health (Department of Health, 2004)	Prioritised the improvement of the population's mental wellbeing
The World Health Organisation Mental Health Declaration for Europe (World Health Organisation, 2005)	Acknowledged the important role of mental health promotion, and, much like Dahlgren and Whitehead's model (1991), it recognised the damaging association between health and mental health problems, social withdrawal, unemployment, homelessness, and alcohol and substance abuse. They endorse the philosophy that there is no health without mental health, and state that mental health and mental well-being are fundamental to quality of life.
Our Health, Our Care, Our Say (Department of Health, 2006)	Shifted focus from treating poor health towards its prevention. It also advocated for the use of social prescriptions for people with long-term conditions to enable them to access a wider provision of services. It termed these prescriptions 'well-being prescriptions'. It also encouraged the use of 'information prescriptions', essentially signposting, as a key method of improving wellbeing for individuals with long-term health conditions, by encouraging them to actively participate in their own treatment.
Marmot Review (Marmot et al., 2010)	Proposed strategies to address the SDH to reduce health inequalities and improve health and wellbeing.
Equity and Excellence: Liberating the NHS (Department of Health, 2010)	Recommended the commissioning of health services be transferred to health professionals, specifically GPs, to create a clinically driven commissioning system that is more sensitive to the needs of patients.
Health and Social Care Act (Health and Social Care Act, 2012)	Granted budgetary control of health services to CCGs comprising of GPs and other health professionals. The recommendations put forwards in Equity and Excellence: Liberating the NHS became law because of this act.
Five Year Forward View (NHS England, 2014)	Stressed the importance of developing innovative approaches to healthcare delivery to ensure the long-term future of the NHS. It encouraged a focus on prevention and wellbeing, patient-centred care, and better integration across services, as well as highlighting the role of VCSE organisations in reducing the pressure on primary care services. It offered SP as an example of an emerging model of healthcare
NHS Planning Guidance (NHS England et al., 2015)	Introduced Sustainability and Transformation Plans (STPs). In STPs NHS services and local authorities collaborate to develop plans for NHS spending in each of the 44 localities across England. They seek to integrate GPs, hospitals, and social care to move towards an integrated and more locally delivered care system. It aimed to develop a holistic and preventative approach to healthcare that considers community resources. In some areas, STPs have evolved to become 'integrated care systems' which represent an even closer collaboration between local services and the NHS.

Making Time in General Practice (NHS Alliance and Primary Care Foundation, 2015)	Quantified current healthcare pressures across England and created recommendations for action. The report detailed an audit of GP appointments aiming to understand why avoidable GP consultations occur, and how the patients attending these consultations could be better directed. The audit was completed by 56 GPs reviewing a total of 5,128 appointments.
Releasing Capacity in General Practice (NHS England, 2016c)	Detailed 10 high impact actions for releasing capacity in general practice: (1) Active signposting, (2) New consultation types, (3) Reduce 'did not attends', (4) Develop the team, (5) Productive workflows, (6) Personal productivity, (7) Partnership working, (8) SP, (9) Support self-care, and (10) Develop quality improvement expertise.
General Practice Forward View (NHS England, 2016b)	Called for more integration across the wider health and social care sectors and highlighted the important role the VCSE sectors could play in supporting GPs. It gave examples of local models of SP which enable GPs to access community-based support for their patients. The report also detailed intentions to appoint a new National Champion for SP.
General Practice Development Programme (GDP) (NHS England, 2016a)	Tackled the opportunities and challenges identified within the reports Making Time in General Practice report (NHS Alliance and Primary Care Foundation, 2015) and the General practice Forward View (NHS England, 2016b). Grouped various strands of funding all of which aim to release capacity within general practice and support the implementation of the 10 high impact actions.
Releasing Time For Care programme (NHS England, 2016d)	Supported general practices to implement their chosen high impact actions.
Tackling Loneliness: A Community Action Plan (Royal College of General Practitioners, 2018b)	The loneliness strategy also detailed further investment for SP, including guidelines to support the development of services and training for link workers. Whilst the focus of the strategy was to target loneliness, there was no indication that the planned SP services would solely target this, consequently, it can be assumed that the service will aim to address the wider determinants of health, like most services currently in practice.
A Connected Society: A Strategy for Tackling Loneliness – Laying the Foundations for Change (HM Government, 2018)	Plans to tackle the impact of loneliness on health by integrating the public, private, and VCSE sector were introduced. They included plans to expand the provision of SP services, aiming for government supported SP connector schemes (SP services) to be implemented across the UK by 2023.
The Long-Term Plan (NHS England, 2019c)	Built on the ideas presented in the Loneliness Strategy. It set out plans to increase the provision of personalised care and mentioned SP as a method to achieve this.

Table 2.2: Policy relating to SP

The term 'wellbeing' has long been present in healthcare policy. In *Choosing Health* (Department of Health, 2004) improving the population's mental wellbeing was prioritised. Following this, the World Health Organisation Mental Health Declaration for Europe (2005) endorsed the philosophy that mental wellbeing is fundamental to quality of life and recognised the association between social factors and health. The use of the term 'wellbeing' in policy was crucial as it implied a wider view of mental health compared to the traditional definition, the absence of psychopathologies (Westerhof and Keyes, 2010), by encompassing the determinants of health (Cameron et al., 2008, Dahlgren and Whitehead, 1991). The importance of recognising that people can have a good quality of life and feelings of wellbeing regardless of the presence, or absence, of physical symptoms of illness became increasingly paramount within policy in the years following this (Dodge et al., 2012), and many policy documents focussed on wellbeing as a new model of healthcare for the NHS (Department of Health, 2014b, Department of Health, 2015, Department of Health and Social Care, 2006, Department of Health and Social Care, 2010, NHS Alliance and Primary Care Foundation, 2015, NHS England, 2016c).

Whilst much literature does not explicitly mention SP, the ideas put forward within it have provided a supportive climate for the advancement of the concept. For example, the Marmot Review (Marmot et al., 2010); this was an independent review that proposed strategies for reducing health inequalities in England, the findings from which informed both national and international health policy. The findings also raised awareness of the SDH, and increased healthcare professionals' commitment to address them (University College London, 2014). The Marmot Review (2010) stressed that actions to address the SDH are essential to improve health and wellbeing and to reduce health inequalities. Like SP, the Marmot Review supports patient-centred care, self-management, and the integration of healthcare with VCSE services. This support is reflected in the NHS Five Year Forward View (NHS England, 2014) which detailed how the NHS needed to evolve over the following five years to meet population demands; again, the concepts discussed in this are supportive of SP. Integral to the plans put forward were the concepts of self-management, health promotion, and the better integration of primary healthcare and the VCSE sector. The development of stronger partnerships with the VCSE sector are considered to be crucial to the development of coordinated and person-centred services (NHS England, 2014).

Much policy has discussed the important role that services in the VCSE sector can play in improving health (Department of Health, 1999, Department of Health and Social Care, 2006, NHS England, 2014, NHS England, 2019c) and the need for better integration between sectors (HM Government, 2018, NHS England, 2014, NHS England, 2016b). Despite policy from 1999 recommending that VCSE organisations should be linked with primary healthcare to address social factors (Department of Health, 1999), this was only put into practice seven years later when the recommendation was

furthered in the document *Our Health, Our Care, Our Say* (2006) which advocated for the use of wellbeing and information prescriptions to link people in primary care with the VCSE sector. However, no clear distinction between the two types of prescriptions discussed was offered, with information prescriptions seeming to be a component of wellbeing prescriptions rather than a separate entity.

Despite reports suggesting that a connected healthcare system would support more efficient delivery (Marmot et al., 2010, NHS England, 2014), this linking requires a great deal of infrastructure. The idea of joined-up care has been advocated for a number of years (Department of Health, 1999), yet it is only recently that practical steps to support the ideas have been implemented (HM Government, 2018). The granting of budgetary control to the newly devised Clinical Commissioning Groups (2012) gave GPs and other clinicians more influence over commissioning decisions in relation to their own patients (Dayson and Bashir, 2014, Department of Health, 2010). This created the potential to facilitate joined-up care (Thomson et al., 2015). Joined-up care was further facilitated by the introduction of STPs (NHS England et al., 2015). This represented a shift in healthcare to one which provides integrated services to meet the needs of the changing population. In some areas, STPs evolved to become integrated care systems which represent an even closer collaboration between local services and the NHS. The Long-Term Plan (NHS England, 2019c) states that every locality in England will be covered by an integrated care system by 2021. Whilst these will replace STPs they will build on the work they have done. With the creation of CCGs, GPs' workload increased, resulting in many being inactive in relation to commissioning decisions, citing lack of time and capacity as barriers to their involvement (Holder et al., 2015). CCGs and STPs were designed to involve GPs making decisions which impact their patients, however, if GPs are unable to participate due to capacity issues, then perhaps this model of healthcare will not be as effective as initially believed. Further refinement is required to ensure GPs can participate. This could be achieved through an increase in capacity.

Making Time in General Practice (NHS Alliance and Primary Care Foundation, 2015) reported that 27% of GP appointments were avoidable if changes to the healthcare system were made. The report noted that avoidable consultations could be reduced through active signposting and new support services being created, for example, SP. Supporting this, the report *Releasing Capacity in General Practice* (NHS England, 2016c) detailed 10 high impact actions to reduce demands on primary healthcare. One of the impact actions was SP, but others, such as supported self-care, promote self-management and preventative healthcare. This shifted the NHS towards a model of promoting health as opposed to treating illness, similar to the preventative ethos of many SP organisations, in particular, holistic models (Kimberlee, 2015a, NHS Alliance and Primary Care Foundation, 2015). The

RCGP (2018a) evaluated the 10 high impact actions and found that only 31% of respondent practices were undertaking SP. Considering that those who are more active in implementing such changes were likely attracted to participate in the survey, the actual number of those utilising SP may be much lower. Furthermore, just 13% of respondents thought SP would significantly decrease workload whilst 46% thought it would decrease workload a little, and 13% thought it would increase workload. One reason noted for this viewpoint was frequent changes in local services. This research highlights the importance of perceptions of SP for its uptake and the need for support for local communities for effective implementation.

SP is advocated as a means to address the need for a focus on wellbeing and to reduce the pressure on primary care services (NHS England, 2016c). It also supports the integration of the VCSE sector into healthcare. However, despite much policy in support of SP, there is very little support for its delivery, and, therefore, the practical implementation of the concept is in its infancy (Dayson, 2017). To address this, the General Practice Forward View (NHS England, 2016b) detailed the intention of NHS England to appoint a new National Champion for SP to support the implementation of services on a national level. However, recently it has been noted that an overhaul of the General Practice Forward View is required due to dramatically increasing pressures on healthcare services, thus the recommendations made may alter (Stokes-Lampard et al., 2018). In 2017 SP was included in 75% of STPs (Department for Culture, 2017). This figure was projected to increase with the introduction of integrated care systems, as a closer collaboration with local services will support services to develop (Humphries, 2015). However, many services are without secure, or adequate, long-term funding (NHS and England, 2016, Primary Care Hub, 2018). Specific funding to support the creation and maintenance of SP services is required to ensure their longevity (Healthy London Partnership, 2018).

Some funding opportunities have, in-part, catered to SP (NHS England, 2016a). An example of this is the Time For Care Programme (NHS England, 2016d) which was found to have been utilised to implement SP by just 31% of respondents in a separate evaluation (2018a). Specific financial support for SP was announced in July 2018. The Department of Health and Social Care revealed that 23 SP schemes would receive a share of £4.5 million pounds funded through the Health and Wellbeing Fund. Both new and existing services were invited to apply for the funding which would fully fund a year of running costs. Additional joint funding from local commissioners was also agreed for the subsequent two years (Department of Health and Social Care, 2018b). Whilst this appeared to be a positive step, the funding did not cover an adequate number of services across England, and the funding was short-term. In Tackling Loneliness published by the Royal College of General Practitioners (2018b) provision for all GP surgeries to have access to a SP service was requested, however, this would not be possible with the current provision of funding. Since completion of this

thesis, specific long-term funding for SP has been introduced in some areas (HM Government, 2018, Royal College of General Practitioners, 2018b), and policy continues to support the concept of SP (NHS England, 2019c). However, the long-term impact of this is yet to be realised.

Much policy, guidelines, and initiatives create a supportive climate for the development and implementation of SP services (Marmot et al., 2010, NHS England, 2014), and set out a vision for the future of the NHS focussing on new models of care (NHS England, 2014, NHS England, 2016c, NHS England, 2019c). However, whilst the support for such change is evident, there is limited practical support for its implementation (Dayson, 2017). Dayson argues that the responsibility for implementing SP is with local commissioners, and, moving forward, it is them who will determine the success of SP based upon their investment. Finally, although there are a range of policy documents which support the principles of SP, the term is not utilised to describe the principles in every document. This disparity of terms may reflect the varying models of SP in practice and could be a reason why SP has been discussed in various documents but has not yet been fully integrated into healthcare and operationalised on a national scale.

2.7 Conceptualising Social Prescribing

There is currently no widely agreed theoretical underpinning for SP (Kellezi et al., 2019, Stevenson et al., 2019). Consequently, ideas from other areas need to be considered. Concepts adopted in both self-management and integrated care could be applied to SP. The theories considered are discussed in the subsequent section. Then, the RMIC is introduced and explored as the theoretical underpinning for this research.

2.7.1 *Theories Considered*

As SP shares similarities with self-management (discussed in section 2.5.1), theories relevant to this were considered, specifically the chronic care model which reflects the importance of support for self-management (Wagner, 1998). The chronic care model theorises that, improved outcomes are the result of productive interactions between informed and activated patients, and a proactive team of healthcare professionals (Barr et al., 2003). It suggests that six components affect this interaction: health systems, self-management support, decision support, delivery system design, clinical information systems, and community resources and policies (Wagner et al., 1999). Chronic care models have been applied, and shown successes, in the treatment of multiple chronic physical illnesses, such as diabetes, congestive heart failure, and mental health conditions (Bodenheimer et al., 2002, Miller et al., 2013). However, whilst SP is advocated for the treatment of chronic health conditions (Carnes et al., 2017), it also addresses broader issues impacting an individual's health which are not captured by the chronic care model. The model does consider community resources

and policies, but this is inadequately defined and does not reflect the complexity and interplay of the environmental factors that impact health (Glasgow et al., 2001). Without action to address these factors, the prevention of illness is challenging (Barr et al., 2003). The model was expanded to include the role that the SDH play in influencing individual, community, and population health (Barr et al., 2003). However, the chronic care model does not focus on the integration of community and healthcare services, and its focus is on clinical illness, rather than the wider social factors that SP considers. Consequently, it was not deemed suitable to conceptualise SP in this research.

As it is challenging to apply clinically focussed theories to SP, such as the chronic care model (Wagner, 1998), some researchers have instead adopted theories from sociology in their work (Kellezi et al., 2019). Stevenson et al. (2019) propose the application of the social cure (otherwise known as the social identity approach) to SP (Haslam et al., 2018, Wakefield et al., 2019). This approach contends that social group memberships are important for social life, health, and well-being (Torrens, 2012), but only if they are identified with (Sani et al., 2015). Group identification is thought to have benefits, such as enhanced self-esteem and reduced loneliness (Greenaway et al., 2015, Haslam et al., 2018). Kellezi et al. (2019) applied the social cure to their research into the social factors influencing health and the efficacy of SP. They found that the efficacy of SP can be explained through the concepts of the social cure, such as, increased group memberships, a sense of belonging, and feelings of social support. Whilst the social cure can provide insight into why SP leads to positive outcomes, it focusses on the impact SP has on an individual's social connections, rather than the wider benefits of SP, housing, and finance for example. Moreover, it looks specifically at the service user, rather than the wider infrastructure involved.

Another theory from sociology employed in SP research is the social capital theory (Nahapiet and Ghoshal, 1998, Polley and Dixon, 2016, Wright, 2015). White et al. (2017) adopted this theory to explore the relationships between healthcare professionals and professionals in the VCSE sector. The social capital theory posits that interpersonal relations create value for individuals as they offer resources which can be used for achieving desired outcomes (Wright, 2015). This theory was employed in White et al.'s (2017) research to consider stakeholders' understanding and beliefs (cognitive dimension), reciprocation and co-operation (relational dimension), and network ties (structural dimension) (Nahapiet and Ghoshal, 1998, White et al., 2017). Similar to the social cure (Haslam et al., 2018, Wakefield et al., 2019), this theory focusses on social connections and the outcomes associated with this. Yet, SP can address wider needs than this alone.

Neither the social cure or the social capital theory allow for the wider infrastructure surrounding SP to be considered, nor the living and working conditions of the service user, instead they focus on a

single layer of the SDH model (Dahlgren and Whitehead, 1991). Whilst research has found that consideration of the provider-user level is important for the implementation of SP (RAND Europe, 2012), addressing this alone overlooks the important role other factors play in the delivery of multifaceted integrated care (Kodner, 2009). Additionally, the Medical Research Council (MRC) recommends that researchers do not concentrate on theories from a sole discipline to evaluate complex interventions, that aim to achieve community, organisational, or population-level change (Hawe et al., 2009, Moore et al., 2014). Consequently, ideas outside of sociology need to be considered.

Due to the links between SP and integrated care, theories from this discipline can be explored. Organisational theories are adopted in the literature to investigate the delivery of integrated health and social care (Chandler et al., 2016). Organisations can be regarded as systems, and the traditional model of systems views them as machines (Edgren, 2008, Morgan, 1997). In these machines there is a 'constructor' who describes the integral parts and how they are supposed to operate together. Change is a linear and predictable process that is controlled by constructors. The machine model of thinking regards change to be a direct consequence of the adherence to plans. If problems arise that prevent change then these are thought to be due to incorrect expectations or refusal to take prescribed action (Rowe and Hogarth, 2005). In this model of thinking there is constant top-down monitoring and no capability to adapt when issues occur as all systems have to be 'pre-programmed' (Edgren, 2008). Many integrated care models are grounded in this traditional system view with top-down control (Nicholson et al., 2018, Valentijn, 2016). Yet, evidence suggests that managing organisational systems as machines, and applying top-down strategies and change at the macro level only is ineffective for achieving sustainable integrated care (Begun, 2003, Grudniewicz et al., 2018, Tsisis et al., 2012). This is because the machine system overlooks the complexity of integrated care and the organisations involved (Edgren, 2008).

In response to the shortfalls of the machine model of thinking, it has been proposed that integrated care systems are instead thought of as living organisms, or a complex adaptive systems (CAS) (Holland, 2006). The CAS is defined as a dynamic network of agents acting in parallel, constantly reacting to what the other agents are doing, which, in turn, influences behaviour and the network as a whole (Holland, 1992). In the CAS theory systems are viewed as non-linear and able to adapt to a changing environment (Haupt, 2016). The theory adopts a bottom-up approach and focusses on the patterns and relationships within and between the parts to understand and act on the unpredictable aspects of working in dynamic organisations (Tsisis et al., 2012, Zimmerman et al., 2000). A core component of CAS is self-organisation, in which systems organise from within via the interaction of agents and their reactions to external stimuli; this can lead to the emergence of novel phenomena,

and the occurrence of new structures as revisions are constantly being made (Chandler et al., 2016). The CAS theory has been adopted to conceptualise integrated care (Grudniewicz et al., 2018, Tsisis et al., 2012), and SP (Polley and Dixon, 2016). However, the CAS theory contends that external control, as in the machine model of thinking, can potentially destabilise systems (Tsisis et al., 2012). This is an issue when applied to healthcare systems as these do not always function as a CAS, or bottom-up. For example, in many clinical situations teams work in a systematic way, and instructions are given and executed (Pype et al., 2017).

Research has shown that both bottom-up integration and top-down strategies are important (Valentijn, 2016). This is because both types of integration have been found to compliment the multiple level of integration required in complex interventions (micro, meso, and macro) (Valentijn, 2016). As the CAS theory only considers bottom-up integration, it is not sufficient to examine a complex intervention such as SP. Valentijn et al. (2013) contend that the absence of a framework which takes into account the multiple levels of integration, and the interrelationship between these, hinders understanding and the comparison of different models of integrated care. Consequently, they developed a conceptual framework for integrated care from the perspective of primary care, the RMIC (Valentijn et al., 2013). The RMIC posits that, to deliver integrated, person-focused, and population-based care, vertical, and horizontal integration across the health and social care is essential (Valentijn, 2016). The framework underpins how efforts in integrated care act at different levels (micro, meso and macro), and can be defined from multiple stakeholder perspectives (Valentijn, 2016). A revised edition of the model was developed that incorporated the triple aim outcome domains (Valentijn, 2016); these are discussed further in section 2.7.2. As the revised RMIC combines primary care, which is involved in many models of SP, with the dimensions of integrated care, and the views of multiple stakeholders, it can consider the complex nature of integrated interventions, such as SP. Therefore, the RMIC was adopted as the theoretical foundation.

2.7.2 The Rainbow Model of Integrated Care

The revised RMIC (Valentijn, 2016), displayed in Figure 2.2, was identified as a suitable theoretical foundation for this research into SP.

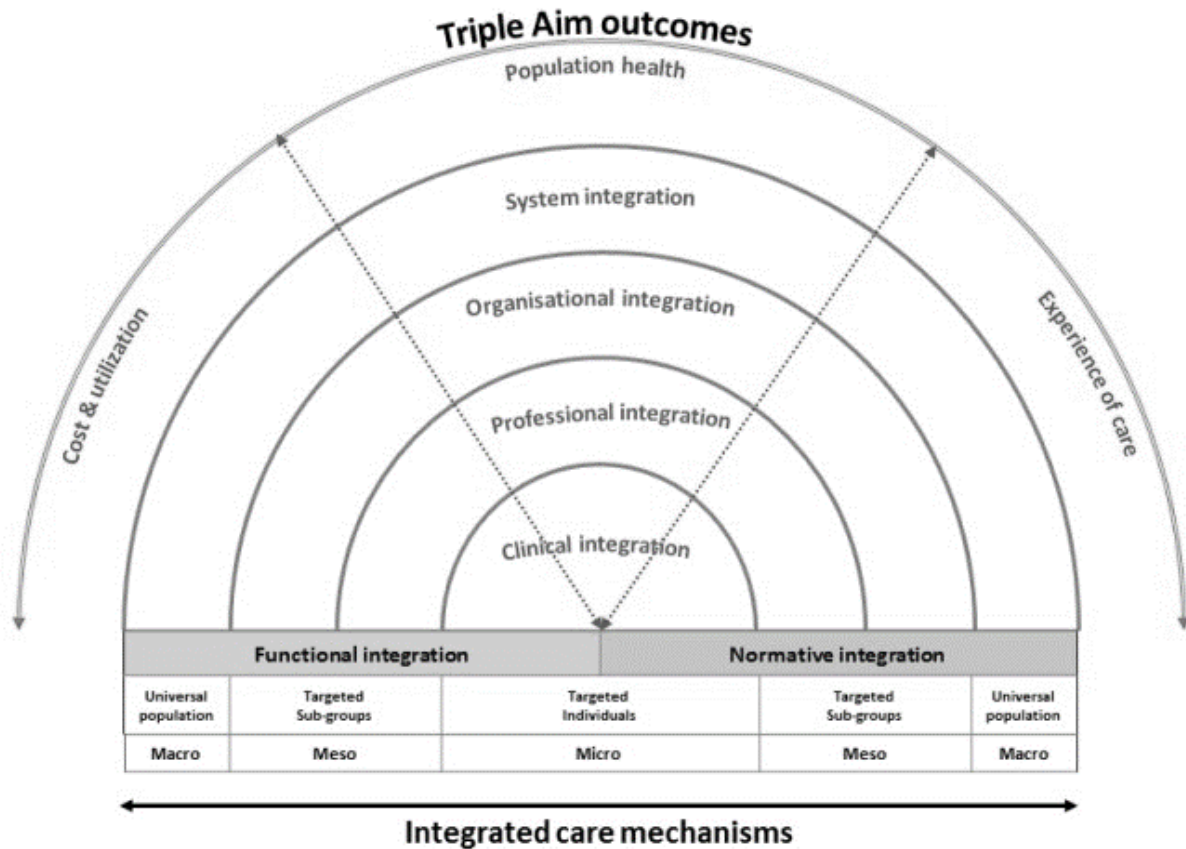


Figure 2.2: The revised RMIC. Source: (Valentijn, 2016: 160).

The outer bow of the revised RMIC represents the Triple Aim framework. The framework was developed to direct healthcare initiatives. It focusses on three core goals: to improve the individual experience of health care, improve the health of populations, and reduce the per capita costs of care (Berwick et al., 2008). The simplicity and clarity of the framework has made it popular among healthcare professionals, policy makers, and researchers (Mery et al., 2017). It has been applied by a diverse range of organisations in America in particular, and is progressively being employed worldwide (Dentzer, 2013, Whittington et al., 2015). The RMIC defines integrated care and primary care using the definitions offered by Leutz (1999) and the WHO (1978) respectively; these are shown in Table 2.3. The tenants of primary care mentioned by the WHO, namely equity on the basis of need and inter-sectorial collaboration are reflected in the concepts of integrated and person-centred care (Valentijn et al., 2013). Also, the functions of primary care, such as being the first point of contact, make it an ideal place to accomplish the integration of health and social care (Starfield et al., 2005).

Concept	Definition
Integrated care	The “search to connect the healthcare system (acute, primary medical and skilled) with other human service systems (e.g., long-term care, education and vocational and housing services) to improve outcomes (clinical, satisfaction and efficiency)” (Leutz, 1999: 77-78).
Primary care	Primary health care “is essential health care based on practical, scientifically sound, and socially acceptable methods and technology made universally accessible to individuals and families in the community through their full participation and at a cost that the community and country can afford to maintain at every stage of their development in the spirit of self-reliance and self-determination. It forms an integral part of both the country’s health system, of which is the central function and focus, and of the overall social and economic development of the community. It is the first level of contact of individuals, the family and community with the national health system bringing health care as close as possible to where people live and work, and constitutes the first element of a continuing health care process” (WHO, 1978: 3).

Table 2.3: The definitions of primary and integrated care adopted by (Valentijn et al., 2013)

The revised RMIC visualises that improving the Triple Aim requires differing integration types across the entire care continuum, this is depicted by the arrows starting in the inner bow of the model and ending at the Triple Aim outcomes in the outer bow (shown in Figure 2.2). The revised RMIC contends that successfully integrated care must demonstrate various patient, social, and economic benefits which, in turn, require collaboration across all stakeholders (Valentijn, 2016). The separate elements of the revised RMIC (Valentijn, 2016) are discussed in the following sections.

2.7.2.1 A Universal and Targeted Focus

The terms ‘universal population’ and ‘targeted sub-groups’ refer to population based care, and the term ‘targeted individuals’ refers to person focussed (also known as patient-centred) care (Valentijn et al., 2013); these concepts are represented within the definition of primary care adopted by the RMIC (Table 2.3). Person focussed care (targeted individuals) acknowledges that disease is a medical, psychological, and social problem (McWhinney, 1997, Valentijn et al., 2013), and is based on an individual’s wants, needs, and values. On the other hand, population based care (universal population and ‘targeted sub-groups) addresses health-related needs (e.g., environmental concerns) within a defined population (Valentijn et al., 2013). Both approaches contend that often health and social issues are inter-related. They recognise the importance of the wider SDH within integrated care as they can link the health and social systems as required in SP (Valentijn et al., 2013).

2.7.2.2 Dimensions of Integrated Care

The revised RMIC (Valentijn, 2016) presents three levels at which integration can occur: the macro (system) level, the meso (organisational and professional) level, and the micro (clinical) level (Ploch and Klazinga, 2002, Valentijn, 2016, Valentijn et al., 2013). The framework also presents two further

dimensions of integration (functional and normative) that integrate the different health systems and the RMIC dimensions (Fares et al., 2019).

The micro level, also termed clinical integration, describes the extent to which services are coordinated across multiple professional and institutional boundaries (Shortell et al., 1994, Valentijn et al., 2013). Typically, clinical integration tends to be disease focused, it looks at ways a specific condition can be managed (Stange and Ferrer, 2009, Valentijn, 2016), similar to self-management (discussed in section 2.5.1). However, in practice, clinical integration requires a person-focused approach to improve an individual's overall health and wellbeing, rather than focussing on a single element (Valentijn et al., 2013). Healthcare professionals need to consider both medical and social needs, and, where possible, patients should be co-creators of their care plan; therefore creating a shared responsibility between the healthcare professional and patient for the patient's health (Janamian et al., 2016). This is reflective of SP in which a link worker works with the service user to understand their needs and identify appropriate referral options. SP requires the service user to be willing to engage due to the active nature of the treatment.

The meso level of integration is separated into organisational and professional. Organisational integration denotes the extent that services are produced and delivered in a linked-up fashion (Valentijn et al., 2013). It relies upon the sharing of role, competencies, and responsibilities between different services (Fares et al., 2019). However, the extensive range of organisations involved in population health makes organisational integration complicated (Kodner, 2009, Stein and Rieder, 2009). Numerous barriers to organisational integration have been identified, such as: organisation specific regulations (Andersson et al., 2011), uncertainty over how costs would be shared (Johnson et al., 2003), lack of clear leadership (Ling et al., 2012, Wihlman et al., 2008), and issues relating to information sharing (Cooper et al., 2016, Parkin, 2019). These barriers can impede organisational collaboration, and also help to explain the slow progress and limited effectiveness of some of the inter-organisational collaboration in healthcare settings (Auschra, 2018, RAND Europe, 2012). SP relies upon the successful collaboration of multiple organisations, such as healthcare services and VCSE organisations.

Professional integration describes partnerships within (intra) and between (inter) organisations (Valentijn et al., 2013). This promotes shared accountability for health outcomes, problem solving, and decision-making (Goodwin and Smith, 2011, Shortell et al., 1996). In SP, professionals must work together to meet the needs of the service user, in particular healthcare professionals and link workers. The absence of professional integration has been found to hinder the delivery of integrated healthcare (Kozłowska et al., 2018, RAND Europe, 2012). Barriers such as power imbalances

(McPherson et al., 2017), differences in working cultures (Dinesen et al., 2011, Parkin, 2019), and educational needs (Pinnock et al., 2009) are experienced.

Macro integration (system integration) refers to the linkage of healthcare services through rules, physical space, structures, and policies (Fares et al., 2019, Valentijn et al., 2013). It is considered to enhance the efficiency, quality of care, quality of life, and service user satisfaction (Kodner, 2009, Suter et al., 2009, Valentijn et al., 2013). The integration of a health system is a holistic approach which is designed around the needs of the service users (Kodner and Spreeuwenberg, 2002, Suter et al., 2009). However, the current disease-focus within healthcare threatens the required holistic perspective as services are fragmented (Stange, 2009). Supportive policy and the availability of resources are examples of system integration applicable to SP (Valentijn et al., 2015).

The functional and normative dimensions of integration span the micro, meso, and macro levels; their role is to integrate the different health systems and the RMIC dimensions (Fares et al., 2019). Functional integration denotes how support functions (e.g., IT systems) enhance service delivery and integration at different levels (Shortell et al., 1996, Valentijn et al., 2013). Pescheny (2019) presents a shared IT system among front-line providers and amongst other healthcare professionals (GPs, link workers, and providers in the VCSE sector) as an example of a support function in SP. The absence of a shared IT system for integrated healthcare has been identified as a barrier to the implementation of services (Auschra, 2018, Cooper et al., 2016, Ling et al., 2012, Parkin, 2019). Normative integration is less tangible than functional integration, it provides a common and informal frame of reference, culture, goals, and values which bind together all levels of an integrated system (Fares et al., 2019, Valentijn et al., 2013). Key features of the normative dimension are a sense of urgency, visionary leadership, and the linking of cultures (Valentijn et al., 2015). Common values (normative integration) are crucial for cooperation and the implementation of integrated care (Goodwin, 2013, Poulsen et al., 2019, Valentijn et al., 2015). The creation of a shared culture across organisations, with coherent norms and goals for practice is thought to facilitate coherent services, and prevent conflicting approaches (Suter et al., 2009). This is important in SP given there is currently no common definition of SP (Carnes et al., 2017, Polley and Dixon, 2016), and the aims, referral routes, delivery models, and level of support offered varies between services (Bertotti et al., 2018, Husk et al., 2016, Woodall et al., 2018); consequently the application of the concept is inconsistent.

2.7.3 The RMIC as the Theoretical Foundation for This Research

SP is a type of integrated care that is implemented in the UK in response to the need for better integration to address the SDH (Dayson, 2017). The RMIC (Valentijn, 2016) combines primary care, which is involved in many models of SP, with the multiple dimensions of integrated care, and the

views of multiple stakeholders, so, it is therefore able to consider the complex nature of integrated healthcare and social interventions, for example SP (Valentijn et al., 2016).

The RMIC informed this research in multiple ways. In the first instance, it supported the execution of the scoping review (chapter 3), as the complex nature of SP was considered during the thematic analysis of the literature identified. Moreover, the RMIC guided the aims and research methods adopted, for example, multiple stakeholder groups were included (GPs, link workers, and service users) in the research (study II) and the broad factors which might impact a service user, such as the SDH (Dahlgren and Whitehead, 1991), were considered (study I). The findings from study II were also examined in relation to the RMIC in chapter 6.

2.8 Chapter Summary

This chapter introduced SP as a form of integrated care to address demands on healthcare services due to the SDH. It considered how, despite SP being an underdeveloped concept, parallels can be drawn between it and the more established concept of self-management to aid understanding. The chapter also discussed the challenges in conceptualising integrated care models and considered the unsuitability of theories from other disciplines. Finally, the RMIC was introduced as a theoretical foundation for this research, and how it was applied was discussed.

Chapter 3: A Scoping Review of the Social Prescribing Research

3.1 Introduction

Whilst the term 'SP' has been in use for a number of years (Shatin et al., 1967), there is limited research on the topic, and much information being present in the grey literature. There are some published reviews of SP literature (Bickerdike et al., 2017, Kilgarriff-Foster and O'Cathain, 2015, Pescheny et al., 2019b). However, these reviews either summarise literature from solely academic sources, consequently missing evidence in the grey literature, or focus on a single element of SP, such as outcome measurement (Bickerdike et al., 2017, Pescheny et al., 2019b). One review does aim to explore the evidence base for SP to map its key components (Kilgarriff-Foster and O'Cathain, 2015), therefore taking a broad approach. However, this review is limited by a lack of diverse search strategy and rigorous methodology.

Both systematic and scoping reviews provide a comprehensive approach to assessing the existing literature (Arksey and O'Malley, 2005, Murray et al., 2016). However, given the scope of SP and its related interventions, a wide and diverse search, that included grey literature, was required to provide information for this review. Thus, a scoping review was conducted to investigate the SP literature as both published and grey literature can be explored in this method. Scoping reviews are not concerned with questions of effectiveness, as in systematic reviews, nor are they conducted to explore causation as in a realist review. Instead, scoping reviews adopt a broad research question that aims to summarise the breadth and depth of a complex and heterogeneous area (Ashcroft et al., 2014, Levac et al., 2010, Shankardass et al., 2012). Consequently, it is a suitable method to explore the diverse range of literature related to SP. Moreover, in scoping reviews the quality of included studies does not need to be assessed (Arksey and O'Malley, 2005, Armstrong et al., 2011). This is because scoping reviews draw from all suitable evidence, rather than only the strongest evidence as used in systematic reviews. This is useful in a review of SP as much information is in the grey literature.

Scoping reviews can explore and map the key concepts, theories, and types of evidence underpinning a research area, and also identify gaps in existing literature (Arksey and O'Malley, 2005, Colquhoun et al., 2014). Unlike a systematic review, a scoping review does not seek to synthesise evidence or to aggregate findings from different studies. Instead, Arksey and O'Malley (2005) identify four main reasons for conducting a scoping study: (1) to examine the extent, range and nature of research activity; (2) to determine the value of undertaking a full systematic review; (3) to summarise and disseminate research findings; and (4) to identify research gaps in the existing literature. The first and fourth reasons were identified as the most relevant for this research.

3.2 Search Methods

Arksey and O'Malley's (2005) methodological framework underpinned the approach to this scoping review. This comprises of five core stages (1-5) and one optional (6): (1) identifying the research question; (2) identifying relevant studies; (3) study selection; (4) charting the data; (5) collating, summarising, and reporting the results, (6) a consultation exercise. Arksey and O'Malley's (2005) framework was adopted, minus the addition of stage six as the review was conducted to inform the subsequent research, rather than to produce research findings. This framework is well established method for scoping reviews. It facilitates a clear structure whilst adding rigour, clarity, and reproducibility (Murray et al., 2016). Both Levac et al. (2010) and the Joanna Briggs Institute (Peters et al., 2015) have suggested alterations to this methodology; these adaptations informed the scoping review process undertaken. For example, the inclusion of a numerical summary (Table 3.1) and qualitative thematic analysis (section 3.2.5) as recommended by Levac et al. (2010). Also, the three step process to identify relevant literature recommended by the Joanna Briggs Institute (Peters et al., 2015) was followed (section 3.2.2). Each of the five stages conducted are described in detail in the subsequent sections.

3.2.1 *Identifying the Research Question*

The focus of this review was to explore the existing research on SP and its related concepts to identify gaps and shortcoming to inform the subsequent research. Arksey and O'Malley (2005) recommend adopting a wide approach to generate breadth of coverage, as, decisions regarding parameters can be made once some sense of the volume of the literature is known, and familiarity with the literature is gained. The research question used to guide the search was: what is known from the existing research about SP?

3.2.2 *Identifying Relevant Studies*

Arksey and O'Malley (2005) suggest that broad search terms should be adopted, and several locations should be searched, as, the aim of a scoping review is to provide comprehensive coverage of the available literature (McColl et al., 2009, Pham et al., 2014). To achieve this, additional guidance from the Joanna Briggs Institute (Peters et al., 2015) was followed; this guidance recommends the following three steps.

3.2.2.1 *Step 1: An Initial Limited Search*

Firstly, several exploratory online searches for literature relating to SP were conducted through Google and Web of Science using the search terms 'social prescription' and 'social prescribing'. Alongside key research articles, this also resulted in the identification of published reviews of SP literature (Bickerdike et al., 2017, Kilgarriff-Foster and O'Cathain, 2015, Pescheny et al., 2019b).

3.2.2.2 Step 2: Identify Key Words and Index Terms

The words contained in the title, abstracts, and index terms of the literature identified in step one, and the search strategies adopted in the identified reviews were explored. This exploration informed the subsequent literature search by highlighting appropriate electronic databases and search terms. A university librarian, who is a specialist in psychology and health research, was also consulted. Their input was valuable in the refinement of key search terms and identifying databases most likely to produce appropriate results. SP is a broad area and consequently there are multiple terms to describe it, and many similar concepts; these were included in the search strategy which is detailed below:

("social prescri*" OR "community referral*" OR "non-medical referral*" OR "well being prescri*" OR "well-being prescri*" OR "wellbeing prescri*" OR "social referral*" OR "community prescri*")

Searches were undertaken in 13 academic electronic data bases in:

- Pubmed
- Medline (Medical Literature Analysis and Retrieval System)
- Psychinfo
- Cinahl (The Cumulative Index to Nursing and Allied Health Literature)
- Scopus, Web of science
- ASSIA (Applied Social Sciences Index & Abstracts)
- Embase (Excerpta Medica database)
- Cochrane library
- Sport Discuss
- HMIC (Health Management Information Consortium)
- The University of York Centre for Reviews and Dissemination (DARE, NHS EED, HTA).

Subject headings and Boolean operators were used to narrow, widen, and combine the search. The grey literature was also explored using the following search strategy:

("social prescribing" OR "social prescription").

A more simplistic search strategy, which included the two core terms, was adopted for use with the grey literature due to the limited searching power of many grey literature locations and to narrow the results. The search was conducted in 10 locations:

- The King's Fund
- The Health Foundation
- NESTA (National Endowment for Science, Technology, and the Arts)

- NICE (National Institute for Health and Care Excellence)
- Nuffield Trust
- The Department of Health and Social Care
- NHS England
- OpenGrey
- Google (first 10 pages)
- Google Scholar (first 10 pages).

These locations were chosen to identify relevant evaluations in UK settings.

At the search stage, literature not published in English was excluded and no exclusion criteria relating to publication year were applied. All searches were conducted in May 2020.

3.2.2.3 Step 3: Further Searching of References and Citations

After study selection was carried out, the reference lists of all literature included in the synthesis were searched by hand to identify additional relevant articles.

3.2.3 Article Selection

A large amount of literature was identified through the searches. The results from all searches were combined using the reference management software Endnote X9 and duplications were removed. An initial review of the titles and abstract revealed that many articles were irrelevant. This is likely due to the broad approach adopted in the searches. To narrow down the literature identified eligibility and exclusion criteria needed to be applied. In scoping reviews, the eligibility criteria are not defined in advance, but are instead revised iteratively as researchers become familiar with the research area during the process (Dineen-Griffin et al., 2019, Ghalibaf et al., 2017).

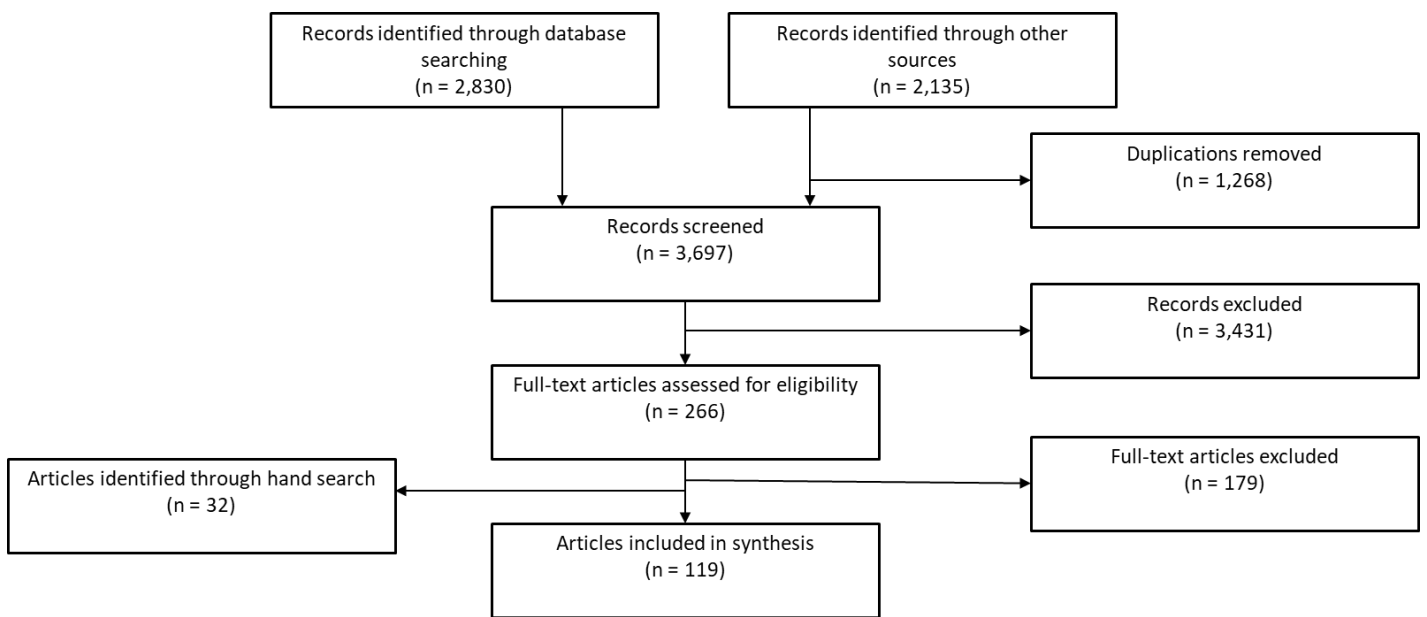
The quality of included research does not need to be assessed in the scoping review methodology (Arksey and O'Malley, 2005, Armstrong et al., 2011). This is useful in a review of SP research as this is an emerging area, consequently there is limited rigorous evidence for the concept and much information is present in the grey literature. Therefore, no exclusion criteria were applied to the type of research design adopted, and no quality assessment was undertaken.

Due to the broad scope of SP, applying strict eligibility criteria was not appropriate. Instead, to be included, research needed to focus on SP, or the use of non-pharmaceutical interventions to address health and wellbeing. For example, research that examined the impact of a community gardening group on wellbeing might not explicitly mention SP, but it would be eligible for inclusion. Literature that did not describe research or a review were excluded, for example discussion papers, websites,

and blogs. This was because this type of literature was vast, and it did not provide insight into the research on SP.

Eligibility was first assessed through a review of all titles and abstracts. This was followed by a full text review of all literature thought to be relevant, because, as noted by Badger et al. (2000), abstracts cannot be assumed to capture the full scope of an article. The process of article selection is displayed in

Figure 3.1. After the literature was screened, there were 119 articles remaining to be included in the



synthesis.

Figure 3.1: Article selection flow diagram based on PRISMA (Moher et al., 2009)

3.2.4 Charting the Data

This stage involved charting key information from the reviewed literature. Charting is defined as a technique for synthesising and interpreting qualitative data by sorting material according to key issues and themes (Arksey and O'Malley, 2005, Ritchie and Spencer, 1994). A summary of each article included was created in which the following details were recorded: reference, information presented, type of data collected, style, location, focus, and key points. The summaries of the included articles are presented in appendix 17. A numerical summary of the included articles was created and is presented in table 3.1.

<i>Feature</i>		<i>Number of articles</i>
Information presented	Research	91
	Review	28
Type of data collected	Qualitative	50
	Mixed methods	42
	Quantitative	27
Style of article	Academic	95
	Social prescribing service report	12
	CCG report	7
	Charity report	3
	Social intervention report	1
	NHS report	1
Location	UK	106
	USA	3
	Spain	3
	Australia	2
	Iran	1
	Netherlands	1
	Scandinavia	1
	Switzerland	1
	Finland	1
Focus	Social prescribing	85
	Social intervention	34

Table 3.1: A numerical summary of the articles included in the synthesis

3.2.5 Collating, Summarising, and Reporting the Results

Data extracted during the preceding stages were reviewed to develop themes. An inductive approach to thematic analysis was undertaken in which themes derived from the data rather than pre-existing literature or theory (Braun and Clarke, 2006, Braun and Clarke, 2019a). These were reviewed and refined multiple times throughout the synthesis process. This resulted in the development the following themes that offered an insight into the current research into SP: link workers play an important role in SP, unclear language impacts understanding, shared understanding is important, healthcare professional ‘buy-in’ is required, funding impacts service delivery and evaluation, lack of service user uptake and engagement, and research into SP is lacking. These themes were common across both the academic and grey literature and are discussed in detail in the subsequent sections alongside the wider literature.

3.2.5.1 Link Workers Play an Important Role in SP

The uptake of SP across the UK has given rise to a new role in healthcare, the SP link worker. The role of a link worker, according to NHS England (2020b), is to spend time with an individual to gain a better understanding of what matters most to them; enabling link workers to identify and suggest meaningful opportunities for support. The intention is, that by working closely with individuals, engagement with VCSE services is likely to be positive and long-term, with sustained engagement

shown to improve an individual's health and wellbeing (Moffatt et al., 2017). Link workers support SP by, amongst other factors, acting as a bridge between primary care and VCSE organisations (Friedli and Watson, 2004, Grayer et al., 2008, South et al., 2008), implementing personalised care (Grant et al., 2000, Moffatt et al., 2017), facilitating service user engagement (Fancourt et al., 2019a, Lovell et al., 2017, Sumner et al., 2019, Wildman et al., 2019a), and improving service user experience (Grayer et al., 2008, Mossabir et al., 2015). Although some link workers have previously worked as a social worker or a healthcare professional (Polley et al., 2017b), there are no specific qualifications required (Keenaghan et al., 2012). Key attributes for the role have been identified, including being non-medical, having active listening skills, empathy, emotional resilience, motivational training, and a knowledge of the support and activities available in the community (Bromley by Bow Centre, 2018, Farenden et al., 2015, Polley et al., 2017c). However, there is some ambiguity surrounding the link worker title and their role within healthcare and SP (Mossabir et al., 2015, White et al., 2010).

Despite the ambiguity surrounding their role, link workers are widely recognised as a key feature of SP (Bickerdike et al., 2017, Sumner et al., 2019, Waddington-Jones et al., 2019), and much research notes the significance of link workers in determining the success of SP (Bertotti et al., 2018, Frostick and Bertotti, 2019, Moffatt et al., 2017, South et al., 2008). Grant et al. (2000) examined the importance of SP using a link worker to support the provision of personalised care in a randomised controlled trial (RCT). Participants with psychosocial problems were randomly allocated to one of two treatment groups, GP care (control group), or GP care alongside referral to a SP service (the Amalthea Project) via a link worker (intervention group). GPs offered advice and referrals for social issues as they typically would in a consultation without a SP service. Psychological well-being and social support were assessed at one and four months. Participants in the intervention group showed greater reductions in anxiety levels, and improvements in ability to undertake daily activities compared to the control group. Although the social prescription was found to be more costly compared to GP care (£153 versus £133 per patient), the research suggested that supported referral, via a link worker, facilitated contact between the VCSE sector and primary care, and thus was more effective than GP care alone. Whilst the conclusion of this research argues that link workers can offer better support for social issues compared to GPs, it does not separate the impact of the SP service from that of the link worker. Therefore, other models of SP, such as signposting or light (Kimberlee, 2015a) that do not utilise a link worker may also offer more effective support than the GP care alone. Moreover, generalising the findings of Grant's study is difficult as the paper revealed the intervention group were prescribed more mental health drug prescriptions compared to the

control group. Consequently, the positive outcomes found may, at least in part, be attributable to this rather than the presence of a link worker.

Addressing the methodological shortfalls of Grant et al. (2000), Bertotti et al. (2015) compared health outcomes between those who had been socially prescribed via a link worker (intervention), and those who had been matched directly to non-medical support by a healthcare professional (control); therefore comparing SP medium and holistic, and, subsequently, the importance of the link worker. Their research found that, despite reduced A&E attendances, there was no statistically significant difference in health outcomes between groups. Additionally, a greater number of primary care consultations were seen in the intervention group compared to the control group. These results suggest that the presence of a link worker has no impact on health outcomes or healthcare usage. However, there are flaws in the study design that could have affected the findings. Participants were not randomly or systematically assigned to groups; those in the intervention group were found to have lower health status at baseline compared to the control group. This could account for the increased consultation rate found and may contribute to the lack of improved health outcomes.

Consistent and long-term engagement is essential to see improvements in an individual's health and wellbeing (Moffatt et al., 2017). Consequently, benefits in the short-term may not be measurable and may account for the mixed outcomes found (Bertotti et al., 2015, Grant et al., 2000). Research has emphasised the importance of link workers for service user uptake and engagement (Fancourt et al., 2019a, Lovell et al., 2017, Sumner et al., 2019, Wildman et al., 2019a) which could lead to long-term benefits. So, instead of evaluating link workers in relation to improved health outcomes, their impact on service user experience should be considered. Evidence suggests that the interaction between link worker and patient is key to the success of SP (Carnes et al., 2017, White et al., 2010). Moffatt et al. (2017) conducted qualitative interviews with SP service users. They found that the quality of the relationship between the link worker and service user was central to achieving improved well-being and promoting a change in health-related behaviour. This was enabled through the setting of realistic and personalised goals and receiving regular feedback and support. Link workers enable complex and long-term health problems, which require a personalised and holistic approach, to be addressed that is not possible in routine primary care due to time and resource restrictions (Moffatt et al., 2017). In Kimberlee et al's (2014a) research, link workers argued that their role is not simply to meet targets, but instead it is to address embedded health and social issues to prevent future ill health. Therefore, their importance cannot be quantified, instead their importance should be evaluated through gathering stakeholder perspectives. Finally, Friedli et al. (2012) concluded that link workers are essential to ensure engagement from disadvantaged service users. This is because high levels of persistence, support, and flexibility is required to engage those

with multiple complex needs, therefore link workers help them to overcome barriers to accessing support.

Despite varied outcome evidence, much research highlights the importance of link workers to facilitate SP (Bertotti et al., 2018, Bickerdike et al., 2017, Moffatt et al., 2017, South et al., 2008, Wildman et al., 2019b). To date, most studies have focussed on outcomes achieved from a health service perspective with little attention to the experiences of link workers themselves, or the key stakeholder who engage with them (Frostick and Bertotti, 2019, Skivington et al., 2018b, South et al., 2008). Moreover, as noted in Kimberlee et al's (2014a) research, the importance of link workers is not something that can be quantified, instead qualitative research is required. Consequently, research which gathers the views of key stakeholders on the importance of link workers would provide better insight into their role in SP.

3.2.5.2 Unclear Language Impacts Understanding

There is currently no widely agreed upon definition of SP (Carnes et al., 2017, Polley and Dixon, 2016) and there is a lack of clarity regarding what the term 'SP' describes. There are multiple stages in a social prescription 'journey'. For example, if holistic SP is considered (Kimberlee, 2015a), there is the action of an individual visiting their GP, the GP referring to a link worker, the link worker carrying out the assessment and referring to appropriate social interventions, and, finally, the individual attending the social interventions. It is evident from the literature that academics are unclear as to the stage at which the social prescription occurs. As a result, definitions often encompass multiple stages of the 'journey' into the single term (Bertotti et al., 2018, Husk et al., 2019, Pescheny et al., 2018c, Pilkington et al., 2017a, Skivington et al., 2018b, Wildman et al., 2019b). Typically, definitions do not differentiate between referring a patient directly to social activities, a referral to a link worker, or the journey which the patient takes as they carry out their prescription.

The SP Network (Polley and Dixon, 2016: 19) published a definition in their annual report: "Enabling healthcare professionals to refer patients to a link worker, to co-design a non-medical social prescription to improve their health and wellbeing". This definition is cited by several academic publications (Bertotti et al., 2018, Bickerdike et al., 2017, Polley et al., 2017b, Torjesen, 2016). However, it does not differentiate between the healthcare professional making a referral and the subsequent social intervention. The uncertainty of what stage the term 'SP' refers to is apparent in the description offered by Mann et al. (2017: 632): "SP is used to refer to "either the process of healthcare professionals (e.g., a general practitioner) prescribing time with a link worker, or both the process of prescribing a link worker and the subsequent community group/activity that is recommended to the service user". This description articulates the issue with current definitions of the concept; however, the research did not offer any insight into how the concept could be clarified.

Consequently, further investigation is required to understand which stage of the 'journey' SP should be employed to describe.

In contrast to this, some definitions fail to consider the scope of SP and are limited to a single point in the process or model of SP. For example, some focus entirely on processes in primary healthcare, omitting the role of the link worker and social intervention in the social prescription, and others do not account for social prescriptions carried out by GPs without the use of a SP service (SP light) (Kimberlee, 2015a, Polley and Dixon, 2016). Moreover, only some definitions include reference to the intended outcome of SP, this is typically to improve health and wellbeing (Bertotti et al., 2018, Duffin, 2016, Polley and Dixon, 2016, Whitelaw et al., 2017). Given the broad concept of SP, and the multiple delivery models (Kimberlee, 2015a), it is challenging to encompass the concept within a single definition. Consequently, the point at which the social prescription occurs needs to be identified to produce a definition which is reflective of SP in practice. This can be achieved through gathering the perspectives of stakeholders in practice.

The importance of a definition reflecting practice is demonstrated in a systematic review of the evidence for SP carried out by Bickerdike et al. (2017). In this, the definition produced by the SPN was employed to determine inclusion criteria. However, despite the definition encompassing various stages of the social prescription 'journey', it omits some referral pathways. As a result of this, only studies which examined holistic and medium SP were included in the analysis. However, SP is also utilised as a direct referral from primary care without the use of a SP service (SP light and signposting). The use of the SPN's definition to determine inclusion criteria has excluded literature relating to this, and, therefore, resulted in the systemic review not being representative of SP in practice.

Not all definitions of SP include the role of link workers (Bertotti et al., 2018, Chatterjee et al., 2018b, Kilgarriff-Foster and O'Cathain, 2015, Ogden, 2018, Skivington et al., 2018b). Typically, it is those definitions which focus on a single element of SP, such as the processes in primary healthcare, which exclude the role. Considering the increasingly pertinent role of link workers in practice their omission is surprising. Ogden (2018) highlighted three core elements of SP, all of which should be represented in the definition: (1) A prescriber – typically a GP, (2) a link worker, (3) a menu of activities. Some definitions exclusively refer to the link worker role in SP (Kilgarriff-Foster and O'Cathain, 2015). For example, the definition offered in a report by HM Government (2018: 25) suggests that the point at which the prescription occurs is with the link worker, as this is the area chosen to focus on:

SP connects people to community groups and services, often through the support of a link worker. These connector schemes employ individuals (link workers) who take

referrals from local agencies (including GPs), and work with people to produce a tailored plan to meet the person's wellbeing needs. They help people to overcome feelings of loneliness by connecting people to activities and support within their local area.

Issues have not only been raised with the definition of SP, also the term itself. For example, the use of traditionally medical language in definitions of SP is a recurring attribute. An obvious example of this is the use of the term 'patient' to describe those accessing SP; this was present in some definitions of the concept (Kimberlee, 2015a, Pescheny et al., 2018c). This is a clinical term, much like the term 'prescribing'. During interviews conducted by the NHS and Health Education England (NHS and England, 2016) respondents identified the term 'SP' as problematic because it does not imply that services work with service users, instead it suggests that things are done to or for them. This suggests that it is not just the definition of the concept that is contested, the term 'SP' itself is debateable due to its medical associations (Alliance Scotland, 2018). However, the term is currently in use in both research and practice, therefore it would be challenging to alter. Instead, the focus should be on developing a better understanding of what the term describes.

It is unclear how many definitions of SP were created. For example, Brandling and House (2007: 3) introduced a well-cited definition of SP (Chatterjee et al., 2018b, Kimberlee, 2015a, Kimberlee et al., 2014a, Pescheny et al., 2018c, Steadman et al., 2017, Thomson et al., 2015, White et al., 2017): "SP creates a formal means of enabling primary care services to refer patients with social, emotional or practical needs to a variety of holistic, local non-medical services". However, no description of how the definition was developed was provided by the authors. It can, therefore, be assumed that the authors created it based upon their tacit knowledge of SP. Yet, their definition excludes the role of link workers, and given their increasingly important role in SP, the definition cannot be considered an accurate reflection of practice.

The lack of specificity and relevance to practice of definitions of SP could be a barrier to understanding the concept. The use of a single clinical term to encompass the multiple stages of such a varying intervention may not be appropriate. However, a single term to describe the concept of SP is valuable for clarity. Therefore, a succinct definition which focusses on the stage at which the prescription occurs is required; although, research is needed to determine at what stage this is thought to be by stakeholders.

3.2.5.3 Shared Understanding is Important

SP needs to be appropriately defined to aid understanding of the concept. The importance of healthcare staff understanding the scope of SP, how patients are supported, and the capacity and skills of link workers were found to be imperative for the successful implementation of SP (Farenden

et al., 2015). Furthermore, the shared understanding of stakeholder roles within the SP process is commonly identified to support implementation (Farenden et al., 2015, Whitelaw et al., 2017).

The uptake of SP across the UK has given rise to a new role in healthcare, the SP link worker. There is evidence to support the importance of link workers in the SP process (Bertotti et al., 2018, Moffatt et al., 2017, South et al., 2008). However, there is ambiguity surrounding the role and this has been found to be a barrier to success (Mossabir et al., 2015, White et al., 2010). Specifically, evidence suggests that GPs are not sure what role link workers play in healthcare and, consequently, link workers are not always accommodated in primary care in terms of provision of reasonable physical space and clinical supervision (White et al., 2010).

The infancy of the link worker position, and the adaptive nature of their work, has meant that a clear understanding of their role is lacking. This is due to discrepancies in the role between SP services based upon whether the link worker is voluntary or paid, the amount of funding the service receives, and the model of SP in use (Kimberlee, 2015a). For example, the model of SP implemented determines the amount of time a link worker spends with each service user (Brandling and House, 2007, Kimberlee, 2015a, Polley et al., 2017c). This can vary between a single point of contact in some models, to multiple follow ups in others (Dayson and Bennett, 2016a).

Despite the discrepancies in title (Carnes et al., 2017), and variations in the wider aspects of the role, the core concepts of the link worker role remain consistent, independent of the model of SP adopted. This is to assess service users and provide suggestions of appropriate support. As the link worker role becomes a staple in healthcare, the need for the wider aspects of the role to be understood increases. Furthermore, lack of understanding of the role could impact service user uptake and engagement in SP, and health professional buy-in. Further research is required to consider this. The Report A Connected Society (HM Government, 2018) sets out plans to pilot a new accredited learning programme for link workers to address this uncertainty and ensure continuity of care; once put into place, this could help clarify the role. However, it is not clear from the report how these resources will be developed. To understand the importance of link workers SP in practice needs to be investigated from the view of multiple stakeholders.

In research, GPs have reported that the broad lack of awareness of SP makes it challenging to discuss the concept with patients, mainly due to time constraints in consultations (Brandling et al., 2011, Friedli et al., 2012). Brandling et al. (2011) identified that some service users did not understand what SP was, or why they were referred, ahead of their initial meeting with a link worker. This resulted in expectations not being met in some instances and could negatively impact uptake and adherence. In Brandling et al.'s (2011) research, link workers reported that they did not always feel

capable of clearly communicating SP in a way that was relevant to service users. This further supports the need for a clear definition that is reflective of SP in practice to support stakeholder understanding.

3.2.5.4 Healthcare Professional 'Buy-in' is Required

Due to the gatekeeper role held by GPs (Forrest, 2003, Greenfield et al., 2016, Groenewegen, 2016, Loudon, 2008, Wammes et al., 2014, Willems, 2001) many GPs are tasked with offering referrals to SP services. As identified in models of SP described by Kimberlee (2015a), GPs are also tasked with providing social prescriptions by referring patients directly to non-medical support. Polley (2018) identified six access routes to SP, five of which included the GP in their delivery. The identification of these access routes highlights the important role general practice plays in the SP process, therefore solidifying their position as a core stakeholder in the concept. However, the lack of healthcare professional 'buy-in' is noted in the literature (Santoni et al., 2019, Sharp et al., 2018b). With primary healthcare being under increasing pressure (Dayan et al., 2014, NHS Alliance and Primary Care Foundation, 2015, NHS England, 2016c), questions have been raised regarding the appropriateness of the addition of SP to the GP role as there is no clear evidence that SP improves health outcomes (Bertotti et al., 2015, Carnes et al., 2017, Loftus et al., 2017). However, 20% of GP appointments are attributable to social issues (Polley and Dixon, 2016), thus non-medical options are required (Friedli et al., 2009, Popay et al., 2007b).

The biomedical model, which considers the origins of illness to be the biological dysfunction of the body, tends to govern primary healthcare (Campbell and Jovchelovitch, 2000, Kilpatrick et al., 2009). The focus on this approach limits treatments to that which is within the scope of medical expertise, leaning towards a preference to prescribe medication to address health concerns, rather than considering non-medical solutions (Busfield, 2010, Johnston, 2007, Rubio-Valera et al., 2014, Taylor et al., 2003). In the biomedical model the patient is frequently considered to be a passive recipient of medical interventions opposing the active patient focus of SP (Wade and Halligan, 2011). The General Medical Services contract reinforces the biomedical model (Checkland et al., 2008). Within this, programmes of care are organised into disease categories and general practices are given monetary incentives for meeting their targets from the Quality and Outcome Framework (QoF). This standardisation of guidelines leans towards a biomedical approach and may obstruct individualised person-centred care (Checkland, 2004).

SP relies on the healthcare professional's ability to recognise social causes of ill-health, their knowledge of the intervention, and their willingness to suggest non-medical options to patients (Popay et al., 2007a). This is hindered by a focus on the biomedical model of health (McConaghie, 2017, Rubio-Valera et al., 2014). Recent policy calls for a move towards preventative and

personalised healthcare that addresses social factors (NHS England, 2019c). This shift has been long-awaited. Research in 2005 asked GPs to choose the strategy which they thought would be most useful for reducing depression amongst primary care patients. The option that was most congruent with the biomedical model, 'greater investment in research to evaluate and improve antidepressant medication', was chosen by just 1% of GPs (Mental Health Foundation, 2005). However, this result was not consistent, as, despite exercise being a widely accepted effective treatment for mild to moderate depression (Carek et al., 2011, Krista et al., 2007, Ströhle, 2009), only 5% of respondents used exercise as one of their first three treatment options for common mental health issues. Instead, 92% of respondents stated that a medical prescription was their most used treatment. This is supported by further research which has found that exercise on prescription is not routinely prescribed despite services being available (Harrison et al., 2005, Mental Health Foundation, 2009). This is consistent with the low number of referrals to SP services from primary care (Bertotti et al., 2015, Laing et al., 2017, Mossabir et al., 2015) and is perhaps due to a focus on pharmaceutical treatment options in primary care. However, there is a lack of understanding of SP, so, perhaps, this also contributes to healthcare professionals' willingness to utilise it.

Despite the need to address non-medical factors in healthcare (Friedli et al., 2009, Popay et al., 2007b), some SP evaluations report receiving fewer GP referrals than expected (Bertotti et al., 2015, Laing et al., 2017, Mossabir et al., 2015). Further research is needed to understand the role of GPs within SP, and to understand why some GPs are not utilising these services. For example, Bertotti et al. (2015), in partnership with The Health Foundation, produced a report on a holistic SP project run by the City and Hackney Clinical Commissioning Group. They concluded that, despite positive health outcomes, and a 25% mean reduction in accident and emergency attendances being achieved in the intervention group, the service received only 50% of the expected referrals from participating GP practices each month. The report did not examine the reason for the lack of referrals. It did, however, find a significant increase in GP consultation rates after SP referrals were given. This is a significant finding. SP is implemented to reduce pressure on primary care (NHS England, 2016c), and yet it is increasing attendances in this instance. This increase may impact GPs' readiness to refer to SP services as it raises questions about the effectiveness of a social prescription.

Despite increased attendances at primary care, patients may be presenting with appropriate concerns, as perhaps they have better understood the support that can be attained from such services. This in-turn improves health in the long-term as less severe issues are addressed prior to them reaching crisis point. However, the reasons for attendance were not recorded in Bertotti et al's (2015) research. Laing et al. (2017) conducted a qualitative evaluation of a SP service and reported that service users experienced positive physical and behavioural changes because of service

involvement. This included weight loss, increased self-confidence, and reduced social isolation, all of which contributed to better management of long-term ill-health. In contrast to Bertotti et al. (2015), Laing et al. (2017) suggests that this service was successful in reducing the demand of the service users on the healthcare system due to improved outcomes, although, unlike Bertotti et al, this was not measured so claims cannot be verified.

Laing et al. (2017) also reported that link workers were positive about the service. However, concerns were raised regarding the small number, and the suitability of primary care referrals. The reasons for this were not investigated as the views of primary healthcare workers were not included in the evaluation. In a case study of the Liverpool Advice on Prescription, service link workers postulated the ways that ongoing GP engagement could be achieved as this was also a challenge faced by their service (South Liverpool Citizens Advice and Liverpool Clinical Commissioning Group, 2017). They stated that communication and engagement were critical, and that feedback and follow up made a real difference. The service sent every GP practice involved a letter each month which included, for example, referral figures and predicted financial benefits. However, GPs' perspectives on this approach were not gathered, and referral rates after putting this approach into place were not measured.

Investigation into GPs' perspectives of SP would provide insight into why referrals are sometimes lacking (Bertotti et al., 2015, Laing et al., 2017, Mossabir et al., 2015). Brandling and House (2007) reported that clinicians were apprehensive about referring their patients to VCSE organisations due to the sustainability of such services. The findings from Brandling and House (2007) are reinforced by White et al. (2017) who found that few healthcare professionals considered non-medical sources of support to be useful or relevant. However, both pieces of research examined a single service, rather than the wider concept. Research that examines the concept on a wider scale is required to better understand healthcare professionals' perspectives of SP as there may be locality specific barriers. White et al. (2017) also noted that healthcare professionals were mistrustful of unfamiliar VCSE organisations and concerned about their accountability for referrals that were unsuccessful. It can be concluded that, if health professionals do not consider such sources of support to be valuable or relevant, they are unlikely to make use of them.

In contrast to White et al (2017) and Brandling and House (2007), some research has found that healthcare professionals are positive about SP. The holistic SP service in East London, the Bromley-By-Bow Centre, is heavily integrated within local healthcare provision and, consequently, relies upon the favourable opinion of healthcare professionals (CentreForum, 2014). A survey was conducted to determine the views of GPs, practice nurses, and healthcare assistants involved with the

organisation (Bromley by Bow Centre, 2016b). The survey indicated that healthcare professionals were overwhelmingly in favour of the centre. They argued that, without it, patient ability to engage with their health would be undermined. Eighty-eight percent of respondents stated that they found the referral process easy and straightforward, and 92% said that the SP options brought benefits to them as a clinical practitioner. However, the survey was only completed by 37 healthcare professionals, less than half of those who can refer into the service. It could, therefore, be argued that those likely to complete the survey are those who have a vested interest in the service. Those who do not often use the service, or do not have a favourable opinion of it, may not support it through research participation. Moreover, the results are service specific. Due to the prominent nature of the service, it is unlikely that the views are representative of other, less prominent services. Further research is required to understand the role of primary care in SP, specifically GPs. This would create an understanding of why referrals to SP services are sometimes lacking (HM Government, 2018, Royal College of General Practitioners, 2018a).

3.2.5.5 Funding Impacts Service Delivery and Evaluation

SP has attracted various streams of funding (Department of Health and Social Care, 2018b, NHS England, 2016a, NHS England, 2016d). Yet, funding is still perceived to be a barrier to implementation (Bertotti et al., 2015, Dayson et al., 2013, Farenden et al., 2015, McConaghie, 2017). In particular, the short-term funding received by services (Dayson et al., 2013) and the lack of funding available for the organisations which receive referrals from SP services is noted (Bertotti et al., 2015, Johnson, 2015, Kimberlee et al., 2014a).

VCSE resources are a core element of SP and are essential for the implementation and delivery of services (Farenden et al., 2015, Friedli et al., 2012). Sufficient funding is required to develop pre-existing local resources to ensure demand can be met, and to commission services to fill any gaps in provision (Bertotti et al., 2015, Thirlwall, 2015). Research notes that some VCSE organisations are unable to meet the increased demand on their service caused by SP without increased financial support (Skivington et al., 2018b, Whitelaw et al., 2017). Without sufficient funding to meet demand, longer waiting times and decreases in the scope of services occur in VCSE organisations (Farenden et al., 2015). Consequently, making it more challenging for referrals to such services to be made during a social prescription.

As a result of the short-term funding often awarded to SP services, staff turnover is an issue as staff are often employed on temporary contracts. Staff may seek more stable employment elsewhere as the future of their role is uncertain (Dayson et al., 2013, Farenden et al., 2015). This creates difficulties in the provision of services. For example, the continuity of the SP service in City and Hackney was negatively impacted when two of the link workers left the service after just a year (The

Health Foundation, 2015b). Also, when the service manager left a SP service in Newcastle, some links to key people within the CCG and GP practices were lost (ERS, 2013). Short-term funding also impacts perceptions of SP services. Brandling and House (2007) reported that clinicians were apprehensive about referring their patients to such services due to concern surrounding their sustainability. Furthermore, funding is required to support the robust evaluation of SP services (Clift et al., 2013). Without proper funding, the required data management software cannot be purchased, and the recruitment of highly skilled staff, who may hold research skills, is challenging due to the relatively low pay (Polley and Dixon, 2016).

The full impact of insufficient funding has not yet been established. Further research is required to understand both the practical implications of poor funding and how it impacts perceptions of the concept. This could be achieved through qualitative investigation with key stakeholders.

3.2.5.6 Lack of Service User Uptake and Engagement

Service users are key stakeholders in SP. A barrier noted by many SP services is the uptake and engagement of this stakeholder group (Brandling et al., 2011, Grant et al., 2000, Grayer et al., 2008, Loftus et al., 2017, Lovell et al., 2017, White et al., 2010). It is imperative that this barrier is addressed to prevent poor service outcomes and wasted resources (Barello et al., 2012, Gidlow et al., 2005). Research has identified some reasons for reduced engagement in primary care-based exercise interventions, these include the cost of participation and the mode of communication with service users (Killingback et al., 2017, Pavey et al., 2012). However, there is limited research which focusses on the factors that impact the initial and ongoing participation of service users in SP (Pavey et al., 2012). In evaluation of one service, GPs reported that engaging patients in SP was challenging as it is a new option in primary care, which is complex to explain, and not always understood or expected by their patients (Friedli et al., 2012). A lack of interest in the type of referral, scepticism about its benefit, and patient preference for pharmaceutical options have also been noted as reasons for poor engagement in evaluations of individual services (Friedli et al., 2012, Whitelaw et al., 2017). The identification of factors which create barriers to uptake and adherence of SP across multiple services could support the refinement of SP in practice (Pescheny et al., 2018a).

A trusting relationship between a patient and healthcare professional has been found to promote acceptance of the professionals' recommendations (Brennan et al., 2013, LoCurto and Berg, 2016, Martin et al., 2005, Pescheny et al., 2018a). However, it has been found that patients find it challenging to discuss non-medical needs with their GP (Butalid et al., 2014, Popay et al., 2007b). Supporting this, studies have shown that GPs find it troublesome and time-consuming to deal with patients' non-medical needs and may, therefore, be reluctant to probe for these (Brandling and House, 2009, Butalid et al., 2014, Kilgore et al., 2008, Silke et al., 2018). This highlights the important

role link workers can play within primary care in the identification and response to the non-medical needs of patients (Pescheny et al., 2018a). It also highlights the importance of gathering multiple stakeholder perspectives in the evaluation of SP (Pons-Vigués et al., 2019).

3.2.5.7 Research into Social Prescribing is Lacking

The current evidence base for SP lags behind practice (Husk, 2017). A review concluded that there is a dearth of good quality evidence to support the implementation of SP services (Centre for Reviews and Dissemination, 2015); this finding is widely supported (Fancourt et al., 2019a, Husk et al., 2019, Price et al., 2017). This theme is divided into four sub-themes: outcome measurement, the service user population, qualitative research, and mixed methods. The following sections discuss the challenges with research in these areas, and the research required to better understand the concept of SP is considered.

3.2.5.7.1 Outcome Measurement

The current evidence base fails to provide sufficient detail to judge either success or value for money, therefore the current enthusiasm for, and implementation of SP cannot be justified (Bickerdike et al., 2017, Dowden, 2019). Quantitative research into the effectiveness of SP typically examines on outcomes through focussing on health outcomes, healthcare usage, and cost (Pescheny et al., 2018a).

Evidence into health outcomes is conflicting. Some research reports positive outcomes after social prescription (Dayson et al., 2013, Grant et al., 2000, Grayer et al., 2008, Kimberlee et al., 2014a, Mossabir et al., 2015), and some reports no significant difference in health outcomes between SP and control groups (Bertotti et al., 2015, Carnes et al., 2017, Loftus et al., 2017, Phillips et al., 2014, The Health Foundation, 2015a). The inconsistency may, in part, be attributable to the variation in tools used to measure outcomes, with some research adopting multiple outcomes measurements within a single project (Friedli et al., 2012, Grayer et al., 2008, Morton et al., 2015). Table 3.2 offers some examples of the varied measurement tools utilised within SP research. The inconsistency in outcomes reported creates challenges in the comparison of services, and thus evidence cannot easily be pooled (Centre for Reviews and Dissemination, 2015, Rempel et al., 2017).

<i>Outcome Measure</i>	<i>Incidences</i>
Warwick-Edinburgh Mental Wellbeing Scale (WEMWBS)	(Brandling et al., 2011, Friedli et al., 2012, Morton et al., 2015, Vogelpoel and Jarrold, 2014)
General Anxiety Disorder – 7 (GAD – 7)	(Kimberlee et al., 2014a, Longwill, 2014)
Hospital Anxiety and Depression Scale (HADS)	(Grant et al., 2000, Morton et al., 2015, Mossabir et al., 2015)
Patient Health Questionnaire-9 (PHQ-9)	(Kimberlee et al., 2014a)
Clinical Outcomes in Routine Evaluation-Outcome Measure (CORE-OM)	(Grayer et al., 2008)
Work and Social Adjustment Scale (WSAS)	(Friedli et al., 2012, Grayer et al., 2008)
General Health Questionnaire (GHQ-12)	(Grayer et al., 2008, Phillips et al., 2014)
COOP/WONCA Functional Status Assessment Charts	(Grant et al., 2000)

Table 3.2: The outcome measurement tools used in SP evaluations

Many of the outcome measures currently employed in SP research collect self-reported data for which reliability and accuracy cannot be established (OECD, 2013); particularly when the power differences between healthcare professionals and patients are considered (Goodyear-Smith and Buetow, 2001, Koeck, 2014). Patients may minimise or exaggerate symptoms to avoid negative consequences, to gain something (for example medication or disability payments), out of embarrassment, or to portray a more positive image of themselves (Palmieri and Theodore, 2009, Vogel, 2019). To address issues relating to self-report, some research focusses on healthcare usage as a measure of success (Rempel et al., 2017). The assumption is that, if an individual has a reduced usage of healthcare services, they have experienced improved health outcomes.

As with the research into health outcomes, research into the impact of SP on healthcare usage is mixed. Grant et al. (2000) and Maughan et al. (2016) found that the usage of primary care services was similar between intervention (SP) and control groups. Whilst Maughan et al. (2016) found a trend towards reduced usage of healthcare services after SP, this difference was not statistically significant. Several studies examining healthcare usage do not use a control group, instead they measure healthcare usage before and after referral to a SP service; this prevents issues with individual differences between groups. Unlike control group studies, many report reduced healthcare usage (Carnes et al., 2017, Dayson and Bashir, 2014, Grayer et al., 2008, Kimberlee et al., 2014b, Longwill, 2014). However, reduced GP attendances varies between 2% in some research (Kimberlee et al., 2014a) to 70% in others (Longwill, 2014). Consequently, it may not be an accurate measure of success alone. Moreover, the reasons for attendance are not captured by the research, service users may visit their GP with more appropriate concerns after a social prescription, but this cannot be determined. While healthcare attendance is an outcome of interest to funders of SP services as they aim to reduce costs, it alone is not a measure of health improvement. Demand on

services may have simply shifted from healthcare to the SP service, so, in fact, they have not reduced their service usage, simply changed their point of contact.

If SP is more cost effective than primary healthcare, then this shift of burden may not be an issue. However, this is challenging to measure due to differences between services in practice (Brandling and House, 2009, Centre for Reviews and Dissemination, 2015, The King's Fund, 2017). Each service has developed due to a specific need in the local area, and all are of varying levels of intensity, thus requiring different staff numbers, premises, and resources (Kimberlee, 2015a). For example, within one model of SP (holistic) Kimberlee (2015a) reported the difference in cost effectiveness to be from £223.74 to £833.00 for each patient supported. Consequently, cost effectiveness is individual to the service it is determined within and widescale conclusions cannot easily be drawn (Ismail, 2017).

The conflicting results across the quantitative measures of SP could be attributable to the short-term nature of much of the research. For example, in the short-term (six months to one year) research has found SP to be costlier than routine GP care (Grant et al., 2000, Kimberlee, 2013, Kimberlee, 2016). However, one evaluation suggested that over 18-24 months SP could save the NHS the equivalent that it required in funding due to reduced NHS usage (Dayson and Bennett, 2016b). Considering that some existing research has not shown reduced GP consultations following a social prescription (Grant et al., 2000, Maughan et al., 2016), it is not surprising that cost effectiveness studies over the short term have not shown healthcare savings. Costs need to be assessed further, and in the long-term, to accurately determine cost effectiveness (Grant et al., 2000, The King's Fund, 2017).

There are issues with quantifying the outcomes of SP due to the myriad of outcome measurements used (Friedli et al., 2012, Grayer et al., 2008, Morton et al., 2015), the short-term nature of evaluations (Grant et al., 2000, The King's Fund, 2017), and the uncertainty of who defines success (Friedli et al., 2009, Ismail, 2017, Philip et al., 2019). These issues are also perhaps compounded by the lack of clear understanding of SP (Carnes et al., 2017, Polley and Dixon, 2016), therefore making the evaluation and comparison of service challenging (Centre for Reviews and Dissemination, 2015, Rempel et al., 2017). Before SP can be evaluated, it must first be understood so that it can be successfully implemented in practice. Whilst much research has focussed on evidencing the impact of SP services through examination of its outcomes, there is a dearth of evidence that aims to understand the concept. A clear understanding of SP in practice is required before the barriers to implementation can be addressed, and to ensure services are appropriately designed for service users.

3.2.5.7.2 The Service User Population

A clear understanding of SP cannot be developed without the need for the intervention being comprehended. This can be achieved through examination of the service user population. For example, the reasons for referral to SP and service user demographic information will provide an insight into why such services are required. Research often reports the reasons for referral to a specific SP service. These are typically determined by both the referring healthcare professional and the link worker. Often more than one reason for referral per service user is cited, and referral reasons are not always consistent between healthcare professionals and link workers (Healthy Dialogues, 2018). Examples of common reasons for referral are displayed in Table 3.3. Often referral reasons are determined by selecting from a list, which is likely to result in inaccurate information due to a limited number of options, and the inability to explain responses. This is evident in research which found that factors such as work, training, and learning support were not given as reasons for referral in a service. However, when service users were asked to set personal goals, achieving, or working towards employment were commonly identified (Steadman et al., 2017).

<i>Reason for referral</i>	<i>Incidences</i>
Mild / moderate mental health issues	(Dayson and Bennett, 2016a, Farenden et al., 2015, Friedli et al., 2012, Grant et al., 2000, Kimberlee et al., 2014a, Steadman et al., 2017)
Chronic physical health issues	(Dayson and Bennett, 2016a, Friedli et al., 2012, Kimberlee et al., 2014a, Steadman et al., 2017)
Social needs / isolation	(Farenden et al., 2015, Friedli et al., 2012, Grant et al., 2000, Kimberlee, 2016, Steadman et al., 2017, Woodhall and South, 2005)
Wellbeing	(Crone, 2011, Dayson and Bennett, 2016a, Kimberlee, 2016, Steadman et al., 2017)
Lifestyle change	(Steadman et al., 2017)
Self-care / management	(Grant et al., 2000, Scottish Government, 2012, Steadman et al., 2017)
Advice	(Farenden et al., 2015, Kimberlee, 2016, Steadman et al., 2017)
Training and learning	(Steadman et al., 2017)
Financial issues	(Farenden et al., 2015, Grant et al., 2000)
Substance abuse	(Friedli et al., 2012, Grant et al., 2000)
Bereavement	(Farenden et al., 2015, Grant et al., 2000)
Housing	(Farenden et al., 2015, Friedli et al., 2012, Kimberlee, 2016)
Frequent users of primary care	(Dayson and Bennett, 2016a, Friedli et al., 2012)
Employment	(Kimberlee, 2016, Steadman et al., 2017)

Table 3.3: Examples of the reasons for referral to SP services

Reasons for referral identify the gaps in traditional healthcare which SP can address. However, they do not provide explanation as to the factors which might lead an individual to experiencing these

issues. Whilst many reports detail some descriptive information of their service user population (Carnes et al., 2017, Dayson et al., 2016, Dayson and Bennett, 2016a, Dayson and Leather, 2018, Healthy Dialogues, 2018, Kimberlee, 2016, Liles and Darnton, 2017), no known research has examined the contributory factors that lead an individual to require a non-medical intervention. To achieve this, a deeper level of analysis is necessary than is conducted in existing research. Much current research notes basic demographic information such as age, gender, and ethnicity (Dayson et al., 2016, Dayson and Bennett, 2016a, Dayson and Leather, 2018, Healthy Dialogues, 2018, Kimberlee, 2016, Liles and Darnton, 2017, Wigfield et al., 2015).

The current analysis of the SP service user population is not rigorous enough to appropriately determine the contributing factors to requiring a non-medical intervention. Further research, which analyses a broader range of information is required to investigate this. This information will support requests for funding and enable services to target their service towards the needs identified. In many studies, service users are considered in relation to their health outcomes and healthcare service usage (Crone, 2011, Grant et al., 2000, Kimberlee et al., 2014a, Morton et al., 2015, Vogelpoel and Jarrold, 2014, White and Salamon, 2011). However, this quantitative measurement does not explain why certain outcomes are achieved, or account for non-medical goals of service users. It has been noted that the goal of SP is not solely to meet healthcare targets, instead it offers a personalised approach to address wider health and social care issues (Kimberlee et al., 2014a), therefore in-depth investigation is required to capture this. Users of any health and social care service are considered experts by experience (Care Quality Commission, 2018); this denotes the significant contribution they can make towards the development of services. However, there is a dearth of evidence that seeks service user perspectives relating to participation in such services (Pavey et al., 2012), or their views on the concept as a whole. It is challenging to quantify the wider benefits of SP due to its individualistic nature and the issues identified in section 3.2.5.7.1, thus, qualitative data must also be gathered.

3.2.5.7.3 Qualitative investigation

The varying quantitative measures used to examine outcomes of SP services is likely due to the different stakeholders who attempt to determine success. Funders want to establish cost effectiveness, healthcare wants to see reduced usage of their services, and service users have their own individual and personal goals (Ismail, 2017). The issue of 'who defines success?' is prevalent in many discussions surrounding the evaluation of SP (Friedli et al., 2009). Much of the available research focusses on the outcomes of services, for example cost effectiveness or health improvement, as this is often what services need to evidence to secure further funding. Due to this, there is a shortage of rigorous research which explores SP in practice. This understanding needs to

be developed before the issue of outcome measurement can be addressed, because, without this, the implementation of services will continue to face barriers in practice. Maximising health is not always the sole goal of services, yet conventional methods of evaluation do not typically incorporate outcomes beyond this (Benning et al., 2015). Constraining the understanding of SP to quantitative outcomes alone does not create a true understanding of such services (Ismail, 2017). It is imperative that the broader value of SP is investigated to ensure proper understanding. This can be achieved through qualitative investigation which enables the collection of rich information (Given, 2008).

Qualitative investigation is used in much of the SP literature, however, much of this does not often adopt a rigorous research design or method of analysis; instead, it simply presents quotes from participants (Centre for Reviews and Dissemination, 2015). Qualitative investigation is also adopted in some of the academic literature on SP to investigate stakeholder experiences (Bertotti et al., 2018, Heijnders and Meijs, 2018, Redmond et al., 2019, Sharp et al., 2018a, White et al., 2017). However, experiences are investigated within a single service, therefore results do not support the development of a clearer understanding of the concept, rather the individual service.

Often, qualitative research into SP focusses on a single stakeholder group (Bromley by Bow Centre, 2016b) or the combination of two groups (Blastock et al., 2005, Laing et al., 2017, White et al., 2017); research rarely considers the concept from multiple perspectives. The inclusion of multiple groups would support the development of a rounded understanding of the concept (Pons-Vigués et al., 2019), and enable information gathered to be triangulated. For example, by combining the results of Laing et al. (2017), Blastock et al. (2005), and White et al. (2017), a comprehensive perception of SP in primary care is developed, due to the inclusion of healthcare professionals, link workers, and service users. White et al. (2017) reported that healthcare professionals were concerned about poor service user perceptions of SP services, and how this would reflect on themselves as professionals. However, if the results from Laing et al. (2017) and Blastock et al. (2005) are considered, it is recognised that service users generally have a positive opinion of SP services, valuing the offer of extra support. Some existing research has included these three stakeholder groups in their qualitative research (Pescheny et al., 2018c, White, 2012). However, as with much of the research discussed (Bertotti et al., 2018, Heijnders and Meijs, 2018, Redmond et al., 2019, Sharp et al., 2018a, White et al., 2017), this research was conducted on single services, consequently, the research is not reflective of SP as a concept, rather, of the strengths and weaknesses of a particular service.

3.2.5.7.4 Mixed-methods research

Outcome measurement is widely used to determine the success of SP services. However, research in this area is conflicting (Dayson et al., 2013, Grant et al., 2000, Phillips et al., 2014), and there is no common outcome measurement tool, therefore the pooling of evidence is difficult (Centre for Reviews and Dissemination, 2015, Rempel et al., 2017). The challenge in determining appropriate outcomes is perhaps compounded by the lack of clear understanding of SP (Carnes et al., 2017, Polley and Dixon, 2016). Before SP can be evaluated, it must first be understood so that it can be successfully implemented in practice. Limiting the understanding of SP to quantitative outcomes alone does not create a true understanding of such services (Ismail, 2017). To understand SP in perspectives from multiple localities enables the concept of SP to be examined rather than evaluating a particular service, as much pre-existing research does (Bickerdike et al., 2017, Chatterjee et al., 2018a, Pilkington et al., 2017a). The inclusion of multiple perspectives ensures a rounded understanding of the concept and enables views to be triangulated; currently there is limited existing research that combines multiple perspectives (Pescheny et al., 2018c, White, 2012). In practice, first the service user population, and the reasons people require such a service needs to be investigated. This will help develop an understanding of where SP fits within healthcare, and the demand it addresses. There is currently a lack of in-depth information in these areas, with much of the pre-existing research presenting basic descriptive statistics only (Dayson et al., 2016, Dayson and Bennett, 2016a, Dayson and Leather, 2018, Healthy Dialogues, 2018, Kimberlee, 2016, Liles and Darnton, 2017, Wigfield et al., 2015). To further understand SP in practice, in-depth qualitative investigation is required that collects the perspectives of multiple stakeholders from multiple localities and services.

The collection of quantitative information, such as service user data, allows the user population to be investigated and the need for such services to be examined. Qualitative methods allow for the complexity of SP to be examined and the areas of importance to each stakeholder group to be clearly articulated. Consequently, mixed methods research is required to support the development of an understanding of SP in practice. In some existing research, service user demographic data are presented alongside qualitative investigation (Friedli et al., 2012, Kimberlee, 2016), however, no detailed analysis of the quantitative data is performed, and the quantitative and qualitative information is not combined. Consequently, this is not considered mixed methods research. Some SP research has adopted a mixed-methods design. However, this either focusses on the efficacy of the intervention that an individual might be signposted to during a social prescription (Howarth et al., 2018, Thomson et al., 2018), or an individual service, and therefore, does not provide insight into the concept as a whole (Carnes et al., 2017, South et al., 2008, Woodall et al., 2018).

3.3 Chapter Summary

SP has been put forward as a means to address the SDH (Dahlgren and Whitehead, 1991) and facilitate integrated person-centred care (Dayson, 2017). This notion is permeated through policy, however, despite some existing research, there is inadequate evidence and understanding to support the wide scale implementation of the concept (Bickerdike et al., 2017, Centre for Reviews and Dissemination, 2015, Husk et al., 2019, Kinsella, 2015, Rempel et al., 2017, South et al., 2008). Consequently, research is required that is broad in nature to develop this understanding. In particular, the language surrounding SP needs to be investigated to both develop a definition that is reflective of practice, and determine the wider processes involved.

Research suggests that GPs do not feel confident communicating SP in a way that is meaningful to their patients (Brandling et al., 2011, Friedli et al., 2012). Stakeholder understanding and perspectives of SP need to be investigated to develop a clearer understanding of the concept in practice, and to support the development of services. Much research highlights the importance of link workers to facilitate SP (Bertotti et al., 2018, Bickerdike et al., 2017, Community Action Southwark, 2015, Langford et al., 2013, Moffatt et al., 2017, South et al., 2008, Wildman et al., 2019b). However, to date, most studies have focussed on outcomes achieved from a health service perspective, with little attention to the experiences of link workers themselves (Frostick and Bertotti, 2019, Skivington et al., 2018b, South et al., 2008). This type of research would help clarify the link worker position, and provide a different perspective on SP. Furthermore, research with GPs' is required to understand their role in SP and their perspectives of the concept; this is important to identify why referrals to SP services are sometimes lacking (HM Government, 2018, Royal College of General Practitioners, 2018a).

In the themes identified (section 3.2.5), some factors which negatively impact SP in practice were discussed, for example unclear language, shared understanding, and funding. In the scoping review, only two examinations of the barriers to SP were identified (Healthwatch Shropshire, 2019, Pescheny et al., 2018c). Healthwatch Shropshire (2019) collected the views of multiple stakeholders through unstructured questioning. The data collection method lacked clarity and rigour, and no analysis of the data was performed. Pescheny et al. (2018c) identified barriers through a systematic review which, although is a rigorous research method, is limited by the poor-quality of research reviewed. At the time of writing, no research has specifically aimed to determine the factors affecting the implementation and delivery of SP as a whole, although a research protocol which sets out intentions to study this has been published (Pescheny et al., 2018b). SP is not yet reaching its full potential (Bickerdike et al., 2017), exploration of the barriers could inform policy and practice, and

potentially improve the future service provision (Durlak and DuPre, 2008, RAND Europe, 2012). Furthermore, quantitative investigation is required to explore the underlying contributory factors to an individual requiring a non-medical intervention. This will support the appropriate targeting of services and provide a better understanding of the service user population than is currently available from the literature.

To conclude, this chapter has provided an overview of what can be known from the current research into SP and has highlighted areas for further investigation. There is a general lack of clarity over many aspects of SP, such as language and the roles of various stakeholders. This will have implications for the design and delivery of services. To investigate this, multiple stakeholder perspectives need to be gathered, and both quantitative and qualitative methods are required.

Chapter 4: Research Design and Methods

4.1 Introduction

The rigour of any research is underpinned by the appropriateness of the chosen approach and its supporting philosophical stance (Appleton and King, 2002). Prior to commencing research, a researcher must first have a clear understanding of their philosophical foundation as this guides decisions throughout the research process (Bhaskar and Danermark, 2006, Lipscomb, 2008, Proctor, 1998). Saunders et al. (2011: 107) stated that research philosophy is “*the development of knowledge and the nature of knowledge*”, adding that the approach a researcher adopts affects the way they perceive the world around them, and, in turn, these views and assumptions will affect the choice of research strategy and methodology. This chapter, therefore, presents the research aim and objectives, examines the paradigms at either end of the philosophical continuum, and offers a justification for the philosophical stance employed. Following this, the methodology and research design adopted to investigate the gaps in the current understanding of SP are described. To meet the demands of the overarching research aim, the philosophical paradigm (critical realism), and the chosen mixed methods methodology, a convergent parallel mixed methods research design was adopted. The research was divided into two separate studies: study I (quantitative), and study II (qualitative). Each study had its own objectives which contributed to the overall research aim. This chapter presents the objectives, data collection and analysis methods, and the ethical considerations of each study.

4.2 Research Aim and Objectives

The aim of this research is to examine SP in practice with a view to producing a framework of knowledge to progress understanding and implementation. This was addressed through the following research objectives:

1. To explore and quantify the underlying contributing factors to requiring a non-medical health intervention within a single service user population.
2. To examine stakeholders’ perceptions of SP in the context of healthcare.
3. To understand the role of primary care in SP.
4. To investigate the role of SP link workers.
5. To consider the use of language surrounding SP.
6. To identify factors which hinder the implementation of SP services.

4.3 Philosophical Foundation

A researcher's philosophical foundation is the broad framework comprising of their perceptions, beliefs, and understanding of the theories and practices utilised to carry out research (Cohen et al., 2000). The term represents a collective assumption about the world and how knowledge is derived from it (Collis and Hussey, 2003). Each paradigm is thought to break down into four components: ontology, epistemology, methodology, and methods (Scotland, 2012). Relationships exist between the assumptions of these, which is apparent in the linear relationship they are considered to have (Hay, 2002, Norton, 1999); this is represented pictorially in Figure 4.1. Ontology is the study of how we exist (Lawson, 2014), and epistemology refers to how individuals obtain knowledge of existence. Methodology is influenced by both the epistemological and ontological assumptions. It is the framework used, and the arguments presented, for the methods utilised in research to gather desired information (Bailey, 1997). Finally, method refers to the processes used to collect and analyse information. Although these four elements are represented linearly, with each affecting the next, it is important to note that there are other factors which could influence methodological decisions, these could be practical influences such as timescale and budget.

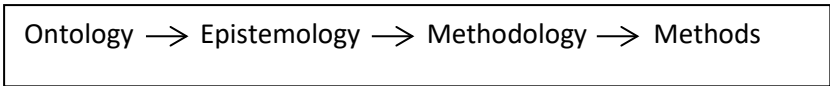


Figure 4.1: The linear relationship of the research paradigm elements. Adapted from White (2012: 41)

Before methodology and methods can be chosen, a philosophical position must first be ascertained, which is influenced by ontology and epistemology. Philosophy is typically introduced through the fundamental paradigms, positivism and interpretivism. These are considered to be philosophically opposing, yet it has been recognised that clear boundaries between paradigms cannot be drawn, instead they sit on a continuum with positivism at one end and interpretivism at the other, in between which further paradigms overlap (Niglas, 2007, Tesch, 1990).

Positivism is strongly aligned with traditional science. It holds that, ontologically, reality is a concrete structure independent from the mind, and therefore it can be epistemologically observed and measured in an objective manner (Guba and Lincoln, 1994, Wainwright and Forbes, 2000). It typically utilises robust quantitative methods of data collection to ascertain a cause-and-effect relationship between phenomena in the natural world, aiming to understand the laws which produce effects. The application of data collection methods, typically reserved for studying the natural world to the social world, fails to allow for the difference between the two, or the complexity of the social world (Delanty, 1997). Positivism assumes that all individuals have the same experience of reality (Appleton and King, 2002). This does not account for the multiple groups considered in the aim of the proposed research, which assumes the potential for multiple

perspectives, and, therefore, multiple socially constructed realities. By only studying observable events under the positive paradigm, factors such as an individual's belief system and personal experience, which may influence their use of a health intervention like SP, are not considered. For example, it can be observed that a lack of exercise is a prerequisite for ill health, however, within the positivist paradigm, the reasons why people continue to not exercise, despite knowing the risk, cannot be understood.

At the opposing end of the continuum is interpretivism. This paradigm considers humans to be separate from the natural world, and consequently different data collection methods are adopted to study the social world (Delanty, 1997). Unlike positivism, interpretivism promotes the use of qualitative methods to interpret the meanings in human behaviour, rather than using quantitative methods to predict or generalise patterns (Neuman, 2000). Interpretivism holds that there are different socially constructed realities varying between people, time, and space; it therefore assumes that different people react differently to the same objective reality (Pizam and Mansfield, 2009). The aim of this research denotes the possibility of multiple perspectives by proposing the exploration of key stakeholder perspectives. However, the intention to examine the SP service user population at scale using quantitative methods is not congruent with the individualised nature of interpretivism.

In contrast to the dichotomy of positivism and interpretivism, critical realism offers a compromise to address the inherent short comings of each approach when applied to the objectives of this research (Houston, 2001, McEvoy and Richards, 2003). Critical realism is a paradigm advocated as a combination of the two aforementioned approaches, with some researchers naming it the 'third way' (Delanty, 1997, Easton, 2010, Hartwig, 2007). Bhaskar, a key proponent of critical realism, proposed three overlapping domains of reality. He terms these the domains of the real, the actual, and the empirical (Bhaskar, 2008). Much like the interpretivist approach, these domains separate domains of reality. The domain of the real refers to the mechanisms that produce events, the domain of the actual refers to the events that are caused by the mechanisms, and finally, the domain of the empirical refers to observable experiences which are initiated through the observation of events. Similar to positivists, critical realism understands the natural world to be a reality independent of human knowledge and experience of it (Archer et al., 1998), in which natural mechanisms generate events (Elder-Vass, 2004). Critical realism contend that it is not possible to both have access to this world and directly observe all aspects of it (Zachariadis et al., 2013). Bhaskar considered causal mechanisms to be social products that can ultimately be understood through, and exist within, phenomena at the empirical level (e.g., human actions and ideas that are generated by these mechanisms), and, therefore, study at this level is appropriate to gather perceptions.

Critical realists understand that each individual's interpretation of natural mechanisms and the world around them is different, as events are interpreted in light of social structures and internal mechanisms (Elder-Vass, 2010). They, therefore, stress the importance of understanding contextual factors in knowledge generation (Zachariadis et al., 2013). Critical realism allows the researcher to understand how the perspectives of participants may be a reflection of their position within their environment (Popay et al., 2007a). For example, whether they are a link worker or a service user. SP is dependent on both internal psychological mechanisms as well as external social mechanisms. It is, therefore, imperative that the researcher is able to gather information on participants' perspectives about the reality around them, the transitive dimension (Owens, 2011), and understand the influences on these perspectives, such as the organisational structures within healthcare.

Unlike the positivist and interpretivist paradigms, critical realism does not support any singular mode of inquiry (Johnson and Onwuegbuzie, 2004). Instead it advocates for methodological pluralism, in which researchers are guided by the research questions (Blaikie, 2007). Danermark et al. (2002) clarify that, whilst all methodologies should be considered equal, not all methodologies are equally suitable. Howe (1988) holds that practical issues should be placed above epistemology. The practical and the empirical take precedence over the ontological and the epistemological (Danermark et al., 2002), a view that is termed 'the dictatorship of the research question' (Tashakkori and Teddlie, 1998).

Critical realism is inclusive of a large range of research methods (Mir et al., 2016). The goal for critical realists is to develop a deeper level of understanding. The paradigm utilises the methodology which is most appropriate to do this, rather than subscribing to a largely quantitative or qualitative approach as in positivism and interpretivism. It recognises that different modes of inquiry focus on different aspects of reality, advocating for the use of mixed methods if required by the research aim (Hurrell et al., 2014, McEvoy and Richards, 2006, Mir et al., 2016). It also understands that all knowledge is fallible, so advocates for the use of multiple methods of data collection, enabling triangulation across diverse sources of information, such as multiple stakeholder groups, to be performed. The aim of the current research is extensive, and calls for a rounded research approach, Creswell (Creswell, 2009: 18) noted:

A mixed method design is useful when either the quantitative or qualitative approach by itself is inadequate to best understand a research problem or the strengths of both quantitative and qualitative research provide the best understanding.

This point is pertinent in the current research, as the singular application of a qualitative or quantitative approach would address some, but not all, of the research objectives.

4.3.1 *The Application of Critical Realism to This Research*

In critical realism, structures and processes are believed to result in generative mechanisms that alter phenomena (Zachariadis et al., 2013). This is applicable to SP. For example, generative mechanisms, such as increased responsibility for own health, may result from service users developing relationships with link workers and engaging with support services; this in turn could result in observable behaviour change (e.g., diet improvements). Furthermore, the inclusion of contextual factors in knowledge generation is key in research informed by critical realism (Zachariadis et al., 2013). In contrast to positivism, critical realism does not restrict reality to structures, processes, and mechanisms that are empirically observable. Instead, social structures, experiences, and perceptions are important. Consequently, critical realism supports the use of the qualitative research required to address objectives two, three, four, five, and six of this research.

Critical realists contend that the intricacy of the social world cannot be understood if phenomena are reduced to the correlations between variables (Zachariadis et al., 2013). For example, they contend that the underlying contributing factors to requiring a social prescription (objective 1) cannot be determined with purely quantitative methods alone. However, critical realism does not deny the existence of patterns and associations between factors. It endorses the use of quantitative methods to identify patterns which might remain unobserved if only qualitative methods are adopted (McEvoy and Richards, 2006). Consequently, the current research aims to assess the underlying contributing factors using quantitative methods alongside qualitative information gathered from service users. As critical realism assumes that structures, processes, and contextual factors change over time and between situations, it is assumed that the service user population will be different across different services. Thus, in line with critical realism, objective one does not aim to establish information that is accurate across multiple settings, but, instead, just within a single service at the time of data collection.

Critical realism was chosen to be the supporting philosophical paradigm for the current research. The methodological pluralism advocated for by critical realism supports not only the understanding of perceptions of SP, but also the exploration of the context in which the observed events were produced (Zachariadis et al., 2013). Critical realism has previously been adopted to examine SP (Pescheny et al., 2018b, White, 2012), further supporting its suitability for the current research. The chosen philosophical foundation has, in-turn, influenced the methodology and methods chosen.

4.4 Mixed Methods

In mixed methods research both quantitative and qualitative data are collected and analysed within the same study (Bowers et al., 2013, Creswell and Plano Clark, 2011). The potential limitations of

one method are counterbalanced by the strengths of another (Johnson and Onwuegbuzie, 2004, Tashakkori and Teddlie, 1998). Thus enabling researchers to explore diverse perspectives and uncover relationships that exist between multifaceted research questions, such as that in the present study (Shorten and Smith, 2017). The variation in data collection methods employed, leads to an increased level of validity and reliability, as the research is approached from different perspectives, providing a more comprehensive understanding, and limiting any gaps in the information collected (Creswell and Plano Clark, 2007); qualitative findings can be used to explain quantitative results, and vice versa (Tashakkori and Teddlie, 1998). This is especially useful when investigating complex multifaceted issues, such as health interventions (Raven et al., 2011), as there are often several different perspectives to consider. For example, in the present research, to gain a comprehensive understanding of SP in practice, the views of doctors, link workers, and service users need to be considered, as well as quantitative data.

Critical realism separates modes of inquiry into intensive, typically qualitative, and extensive, typically quantitative. It advocates for methodological pluralism, in which researchers are guided by the research questions (Blaikie, 2007). Intensive modes of inquiry are necessary to gather stakeholder perspectives (objectives 2-6), and extensive modes of inquiry are required to investigate service user data (objective 1); accordingly, a mixed methods methodological design is adopted to address the research aim.

The use of more than one method or source of data in the study of a social phenomenon is termed triangulation (Bryman and Bell, 2015, Gerrish and Lathlean, 2015, Olsen, 2004). In mixed methods research both quantitative and qualitative information can be triangulated to support the development of a more comprehensive understanding of SP compared to that which could be obtained from the use of a single method (McEvoy and Richards, 2006). For example, quantitative data obtained to address objective one and qualitative data gathered to address objective two can be triangulated to make inferences about mechanisms, social structures and contextual factors that may relate to any quantitative phenomena observed (McEvoy and Richards, 2003). Additionally, data can be triangulated to enhance the reliability and validity of findings through confirmation.

4.4.1 Convergent Parallel Mixed Methods

To meet the demands of the research aim, a convergent parallel mixed methods research design was adopted. In a convergent parallel design, quantitative and qualitative research is conducted concurrently, the results from which are analysed separately but interpreted together (Creswell and

Plano Clark, 2011).

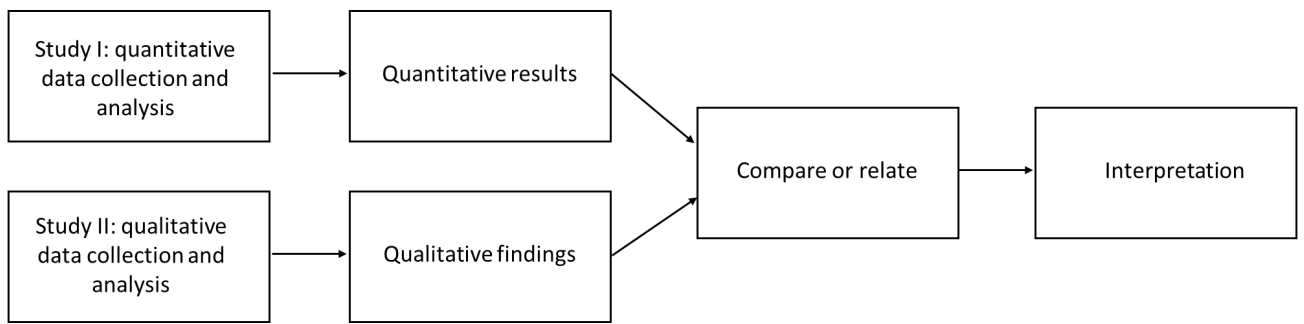


Figure 4.2 displays this process. The present research was divided into two studies. Study I used quantitative methods to explore and quantify the underlying contributing factors to requiring a non-medical health intervention within a single service user population (objective 1). Study II used qualitative methods to investigate the perceptions of stakeholders in SP (objectives 2-6). Findings from both studies were interpretation together to address the research aim.

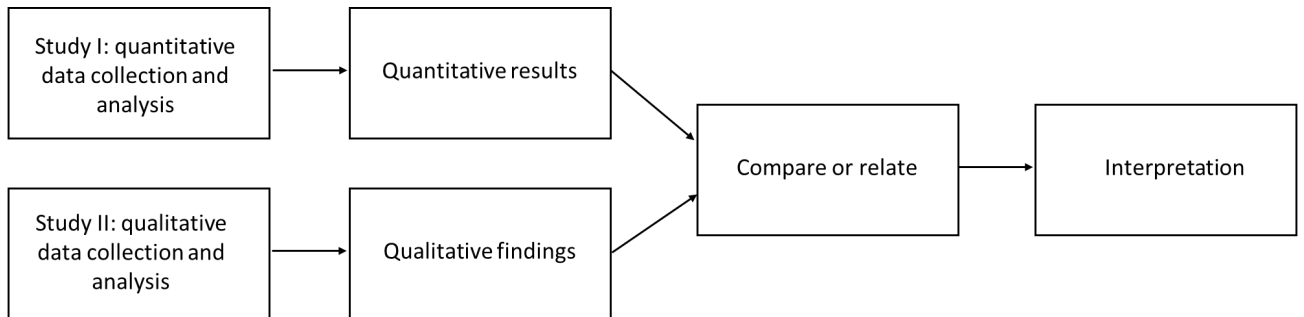


Figure 4.2: The applied convergent parallel design Adapted from Creswell and Plano Clark (2011: 56).

4.5 Study I: Exploring the Service User Population of a Social Prescribing Service

4.5.1 Objectives

The objective of this study was to explore and quantify the underlying contributing factors to requiring a non-medical health intervention within a single service user population (objective 1). To achieve this, extensive, thus quantitative, methods were required.

4.5.2 Data Collection Methods Considered

Both primary data that are specifically collected for the study at hand (Singh and Sahu, 2016) and secondary data, pre-existing data that are utilised for new research (Chawla and Sondhi, 2011), were considered to answer the study aim. Due to the type of data the study required, a questionnaire would be the most appropriate primary data collection technique, however, the collection of these data would have impacted the execution of the study. For example, external factors can lengthen the time scale of research, factors such as the availability of appropriate willing participants or ethical considerations can interfere with efficient data collection (Ghauri and Gronhaug, 2005). Also, once participants had been sourced, a low return rate may have been experienced (Mitchell and Jolley, 2012), participants might have been slow to complete and return questionnaires (Miles and Gilbert, 2005), and might answer questions incorrectly or leave them blank. Furthermore, questionnaires do not accurately reflect the real world, participants may provide differing answers to the information given to a treatment service, therefore data are lower in ecological validity (Plowright, 2011). Thus, primary methods were considered inappropriate, and instead, secondary data opportunities were explored.

When pre-existing data are repurposed to address a new research aim, it is termed 'secondary analysis of existing data' (Cheng and Phillips, 2014). A key strength of primary data is that they can be collected to address the research aim at hand (Morgan and Summers, 2005), whereas secondary data have been collected for some other purpose (Boslaugh, 2007). This means that the data might not be entirely suitable to answer the research objectives and redundant data may be present

(Denscombe, 2014). The type of secondary data required to address the research objectives in the present research were SP service user data. This is collected by link workers who are often untrained in data entry or the importance of complete data for research. As the researcher does not participate in the collection of the data, there is a lack of control over the quality (Boslaugh, 2007, Johnston, 2014, Saunders et al., 2011), the data could contain mistakes, gaps, or bias. This is not a concern with primary data collection as credibility, reliability, and accuracy can more easily be established (Morgan and Summers, 2005). Nonetheless, the use of secondary data offers many advantages, the most obvious being that acquiring a data set is usually lower in cost compared to collecting primary data (Ghuri and Gronhaug, 2005, Kiecolt and Nathan, 1985, Smith, 2008), especially when considering large data sets such as healthcare data. This lower cost is typically due to the fewer resources, such as the researcher's time required (Doolan and Froelicher, 2009, Morgan and Summers, 2005). Also, accessing pre-collected data allows a researcher to study information collected over an extended period; for example, information on SP service users can be obtained since inception of the service, which is potentially a few years previous, without the researcher needing to invest that time. Consequently, despite the identified disadvantages, secondary data were utilised for the purposes of this study.

4.5.3 Data Collection

To address the research objective, a quantitative cross-sectional observation study, which analysed secondary data was adopted. A good working relationship was developed with a SP service who were willing to provide their routinely collected service user data from their electronic data storage system (appendix 5).

The specific contents of the data set were largely unknown to the researcher prior to collection. An appointed employee, from within the participating service, extracted all data collected on all service users since the inception of electronic record keeping (October 2012). All service users were included, no inclusion or exclusion criteria were applied. The data were provided to the researcher on Excel spreadsheets, and any identifiable factors were removed prior to this. The first data set was collected on 14/07/2016, following this, new data were requested and aggregated quarterly until May 2017 when the relationship with the service was lost.

There were no human participants involved in this study, and no new data were created, meaning sample size calculations were not required. As the data were obtained from a single service the generalisability of the results was limited. However, there are vast differences between SP services, and a lack of standardised data collection, therefore it would be challenging to combine data from multiple services.

4.5.4 The Social Prescribing Service

A SP service was a partner in initiating the PhD and was, therefore, willing to participate in the research. This service was based in a large conurbation, described as a deprived area, in England. The service was free at the point of contact and funded by both the CCG and the Department of Health. It aimed to support people aged 16 and over who frequently visited their GP, were high risk for hospital admission, and/or were vulnerable and could, therefore, benefit from a social prescription. The service looked at the whole needs of a person, regardless of what those needs might be, and link workers worked in partnership with service users to jointly identify solutions. Using the models of SP described by Kimberlee (2015a), the participating SP service can be described as 'holistic'.

The service received referrals from multiple GP practices in the locality using a paper referral form. If a GP identified an individual that may benefit from the service, they completed the form which included a space for them to tick the reason for referral and faxed or posted it to the service. Once received, a link worker contacted the individual to arrange a time and place to meet face-to-face. During this meeting, the link worker worked in partnership with the service user to identify and assess their needs. Afterwards, the link worker would work to identify appropriate sources of support and refer the service user to this; this either required a referral form to be completed, if the referred to service required this, or for the service user to be provided with the contact information of the service to make contact independently. After this, the service user engaged with the services or activities identified, and the link worker provided ongoing support; this was typically a phone call every 2 weeks to see if the service user required any further assistance. The number of follow-up calls made was unrestricted and varied dependent on the service user's needs. The exit point from the service was unclear. The pathway of the participating service is summarised in Figure 4.3.

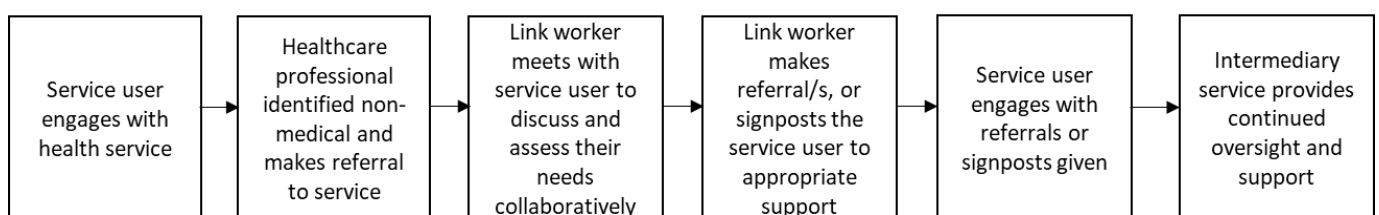


Figure 4.3: The participating service's SP pathway

An external company was tasked with creating a data management and outcome measurement system for the participating service. A cloud-based CRM (Customer Management Relationship) system was developed that was expected to collect data on a myriad of factors which would enable the service to measure client-based outcomes and the wider social impact. The external company claimed the system used a social triage approach to support moving people towards independence,

whilst measuring social impact, value, and capital. The system enabled link workers to input service user data collected during their initial assessment, for example, age, ethnicity, and reason for referral, and then asked for further social impact information which could be collected at different time points after onwards referrals had been made. Despite claims of what the system could measure, issues were identified with the data obtained; this is discussed further in section 5.2. Within this system there was no standardised method of making referrals from link workers to service providers in the VCSE sector. Consequently, link workers referred service users via phone, email, fax, or letter, and, therefore, link workers had to depend on service user reports to track attendance.

4.5.5 Data Analysis

First, the data obtained required cleaning, this involved combining spreadsheets so that the data were presented in an organised manner on a single spreadsheet. Each file was systematically named using the date of collection to ensure ease of location. Next the quality of the data was assessed to inform the potential for analysis using inferential statistics with the intention to establish relationships between variables. Each variable was examined for completeness and accuracy of input information. The data were found to be of poor quality; much of the data were poorly completed or completed inaccurately, and, what some of the data measured was unclear. Inferential statistics were, therefore, not considered appropriate.

4.5.6 Ethical Considerations

No human participants were involved in the current study, therefore, ethical considerations, such as informed consent, were not applicable. The data were anonymised prior to collection so were not subject to the Data Protection Act (Great Britain, 1998), and did not require the approval of a Health Research Authority (Fereday and Muir-Cochrane, 2006). However, internal ethical approval was required, thus this study was reviewed and awarded a favourable ethical opinion, by Birmingham City University Ethics Committee (appendix 1). The data were stored on a secure server, hosted by Birmingham City University, which only the researcher and supervisors had access to. Data will be stored for a period of 5 years after completion of the doctoral programme, after which they will be deleted.

4.6 Study II: Understanding Key Stakeholders' Experiences of Delivering or Receiving Social Prescribing

4.6.1 Objectives

This study aimed to deliver on the following objectives (2-6):

- To examine stakeholders' perceptions of SP in the context of healthcare.
- To understand the role of primary care in SP.
- To investigate the role of SP link workers.
- To consider the use of language surrounding SP.
- To identify factors which hinder the implementation of SP services.

4.6.2 Sample Selection

The RMIC contends that integrated care requires the work of several stakeholder groups (patients and professionals) to be integrated across multiple levels (micro, meso and macro) (Valentijn, 2016). Consequently, to meet the objectives, this study aimed to gather the perspectives of multiple stakeholder groups. The views of the following three groups were collected as they are considered to be key stakeholders in SP (Mossabir et al., 2015): GPs, link workers, and service users.

The inclusion and exclusion criteria for each stakeholder group is presented in Table 4.1. To ensure the correct participants were recruited for each group, non-probability sampling methods were adopted (Kandola et al., 2014), specifically purposive sampling. In purposive sampling, participants are identified for participation based on certain criteria (Palinkas et al., 2015). This ensures that a sample can be logically assumed to be representative of the population under investigation (Lakhanpaul et al., 2014). In this study, purposive sampling was utilised to select stakeholders for participation in research interviews.

<i>Stakeholder group</i>	<i>Inclusion criteria</i>	<i>Exclusion criteria</i>
GPs	<ul style="list-style-type: none"> - Royal College of General Practitioners (RCGP) registered GP working in an NHS practice at the time of participation - Be proficient in spoken English 	<ul style="list-style-type: none"> - GPs based outside out the UK
Link workers	<ul style="list-style-type: none"> - Working in a link worker capacity in a SP service in the UK - Have direct contact with service users - Be proficient in spoken English 	
Service users	<ul style="list-style-type: none"> - Have been a service user of a SP service/have been referred to a social intervention by a healthcare professional - Be proficient in spoken English - Have been over 18 years of age 	<ul style="list-style-type: none"> - Those unable to provide informed consent for themselves at the time of participation

Table 4.1: The inclusion and exclusion criteria for each stakeholder group

The sample size required for this study was informed by data saturation. Within this study, data saturation was applied as a process which recognised that new interpretations and events can emerge with each new interview (Braun and Clarke, 2019b, Dey, 2003, Glaser et al., 1968). Consequently, attempts were made to collect data to the point where no new data were being collected. It was estimated that up to 20 participants per stakeholder group would be needed to reach saturation. This number is in line with Braun and Clarke's (2013) general recommendation of between 10 to 50 participants per group, and Baum's (2002) suggestion of 12 to 20 individuals per group for research that investigates a phenomenon from a specific stakeholder perspective. However, Braun and Clarke (2019b) note that meaning is generated through interpretation of, not excavated from, data. Therefore, judgements about the number of participants, and when to stop data collection, are subjective, and cannot be precisely determined in advance of collection and analysis. Subsequently, this study applied this thinking to sample size considerations during data collection.

4.6.3 Recruitment

Methods of recruitment varied between stakeholder groups. The approaches undertaken are discussed separately in the following sections and the challenges experienced are discussed.

4.6.3.1 General Practitioners

Purposive sampling was used to recruit GPs for participation in this study. The researcher approached GP practice managers from multiple locations across England for participation via email and telephone using publicly available information sourced online (N=58). Practice managers were asked to advertise the study in communal areas using the study recruitment poster (appendix 6), also to distribute the recruitment poster via email to all GPs working in their practice. Four practices

agreed to do this on behalf of the researcher. The SP organisation which provided data in study I had a good working relationship with three GP practices. The organisation manager agreed to email the GP practice managers to advertise this study and ask them to forward this to the GPs working in that practice. GPs who participated in the study were also asked if they would be willing to share the recruitment advert with their colleagues, a form of snowball sampling; the number of participants who carried this out is unknown.

The researcher also contacted the organisers of GP training days and forum meetings via email to ask to attend these events; this enabled face-to-face recruitment. The researcher attended three training days during which they advertised the study. During face-to-face recruitment, those who were interested in participating wrote down their contact details, and a recruitment poster was given to those who were undecided. Those who provided their contact details were sent an email to arrange participation after the event.

Lastly, the researcher encouraged link workers who participated to discuss this study with their colleagues in primary care to spread awareness.

4.6.3.2 Link Workers

Link workers were defined as individuals who work within a SP service and have direct contact with service users; purposive sampling was used to recruit within this population. Firstly, link workers from the organisation which provided data for study I were sent an email containing the information sheet by their manager on behalf of the researcher. Those emailed were asked to contact the researcher to arrange a group interview. The researcher identified further SP services through internet searches (N=21) and during interviews with GPs (N=3). These services were then contacted via email or telephone using publicly available information. Service managers were asked to recruit all those working in a link worker capacity within their organisation to participate in a group interview, and to arrange a time and place for this. Prior to the start of the interview, the researcher ensured that link workers were comfortable participating and did not merely agree to do so due to being asked by someone in a position of authority.

4.6.3.3 Service Users

SP service users were also recruited through purposive sampling. SP services that participated in the group interviews (N=?), along with further organisations which were recruited solely for the purposes of recruitment of service users (N=3), were asked to contact all those who utilised their service on behalf of the researcher. Link workers distributed recruitment posters (appendix 16) to potential participants within their organisation, some also approached service users face-to-face. If a service user agreed to participate, with their consent, their contact information was provided to the

researcher, who then contacted the service user to ensure they understood what would be involved, check they were still happy to participate, and arrange a time and location to collect data; this ensured that participants did not feel obliged to participate due to being asked by someone in a position of authority. Alternatively, some service users contacted the researcher directly using the contact information included in the study advert.

Advertisements displaying study information and the researcher's contact details, were posted on the social media sites of some SP services by the site manager (N=3). The researcher also obtained permission to attend three social intervention groups to which service users had been signposted to recruit participants face-to-face; this included a coffee morning, an art group, and a carer support group. This permission was gained by using publicly available contact information to contact intervention groups, or by the link worker contacting the group on behalf of the researcher. Information sheets were made available to group participants at least two weeks prior to the researcher's attendance. The researcher then was introduced during the session, gave a brief overview of the study, and took questions. If willing to participate, service users then left the group for a period to participate in the study.

4.6.3.4 Challenges with Recruitment

Despite the multiple approaches to the recruitment of GPs, the response rate was low. This is likely due to the heavy workload of GPs and the lack of remuneration for taking part. One GP who participated suggested that, to improve response rates, the researcher could offer a prize draw, however, funding for this was not available. Challenges in recruiting link workers were also experienced. Many SP services are run by an individual, or very few members of staff, therefore, they have limited capacity to participate in activities such as research interviews. Moreover, staff turn-over in SP organisations is high, and some services are only funded in the short-term; this meant that the researcher's point of contact at services was often lost. The challenges with accessing link workers also impacted the recruitment of service users, as one method of recruitment in this group was via SP services.

4.6.4 Data Collection

Critical realists believe in a multi-layered reality, therefore, methods adopted in a critical realist study need to be capable of uncovering a deeper level of understanding (Connelly, 2000). Whilst theoretical concerns influenced the methods chosen, the research aims remained the critical concern (Robson and McCartan, 2016, Sayer, 2000). To address these, a qualitative intensive research approach was selected which allowed the researcher to delve beyond the surface and address 'what', 'how', and 'why' questions (Shapiro, 2007). Primary data collection methods were

deemed to be most suitable as these ensured appropriate data were gathered (Morgan and Summers, 2005), and also guaranteed data quality (Boslaugh, 2007, Johnston, 2014, Saunders et al., 2011).

4.6.4.1 Methods Considered

Typical intensive research methods are interviews, ethnography, and case studies (Sayer, 1992). Each research method has a different purpose. Ethnography aims to describe the culture of a group through the collection of primarily observational data over a prolonged period of time (Creswell, 2003). Case studies explore a topic in its real-world context by collecting detailed information using a variety of data collection methods (Stake, 1995). Finally, interviews vary in type, but generally they aim to investigate the views, experiences and beliefs of individuals on specific phenomena which can provide a deeper understanding of the topic under investigation (Gill et al., 2008). These three core intensive research methods were considered for use in the current study.

Ethnography is a broad area which encompasses varied methods. The most common approach being participant observation (Cohen et al., 2013). The ethnographer immerses themselves and becomes an active participant in an environment such as a SP service, at the same time they make extensive field notes or digitally record participants. If the current study had adopted an observational approach, the researcher would need to observe private conversations between healthcare professionals and service users. These are typically privileged due to the often-sensitive nature of them. Had a researcher been present, it may have affected the behaviour of the professional, and the amount of information service users were willing to disclose, known as 'The Hawthorne Effect' (Chiesa and Hobbs, 2008, McCambridge et al., 2014). Also, the current study aimed to gather stakeholder perspectives which required a deeper level of investigation than the ethnographic approach allows due to its focus on observation. Finally, to conduct ethnographic observations of all three stakeholder groups would have been labour intensive (Atkinson et al., 2001). Ethnography methods, therefore, were deemed unsuitable for the current study.

A case study is not in itself a research method. Instead, researchers select methods which will generate suitable data around a certain phenomenon. Typical methods include observations, interviews, and the collection of personal notes (e.g., diaries) or official documents (e.g., clinical notes), the data are then interpreted by the researcher. By utilising a case study method, a researcher is able to investigate complex social situations consisting of multiple variables in a real-world situation, providing a rich and holistic account of a phenomenon (Bryman, 2015, Yin, 2011). A case study design could be applied to a SP service, from this, the researcher would gain a detailed understanding of that service. However, this understanding would be specific to the environment it was collected in, therefore lacking generalisability. Due to this research aiming to gather

perspectives, methods such as observations or the collection of pre-existing notes were not considered appropriate to answer the research aims. Interview methods would be appropriate, but these could be carried out outside of a case study, therefore the case study approach was not deemed to be suitable for the current study.

Interviews are a widely used research method (Atkinson and Silverman, 1997, Briggs, 1986, Denzin and Lincoln, 1998, Edwards and Holland, 2013, Jamshed, 2014); they aim to explore interviewees' views, experiences, and beliefs of certain phenomena (Gill et al., 2008, Kvale, 1983). Due to this focus on gathering individual perspectives, interviews were considered the most appropriate intensive data collection method to address the aims of the current study. However, in regards to the critical realist stance adopted, it should be noted that interviews are socially constructed, therefore any information produced is specific to the interview and may not represent the wider reality (Miller and Glassner, 2011). To address this issue, interviews with multiple stakeholders from each group were conducted to ensure a more rounded representation of views.

4.6.4.2 Type of Interview

There are three primary types of research interviews; structured, semi-structured, and unstructured (Bryman, 2015, May, 2011). Semi-structured interviews contain elements of both structured and unstructured investigations. The interviewer has several key pre-determined questions which define the areas to be explored, however this is not a strict interview guide, as the researcher is able to ask follow-up questions to clarify, or expand on, certain points (DiCicco-Bloom and Crabtree, 2006, Pope and Mays, 2006). This flexibility allows for the discovery of information important to interviewees which may not have previously been considered by the researcher. The interviews elicit data grounded in the experiences of the participant (Galletta, 2013), thus allowing the researcher to gather rich qualitative data which explores the interviewee's perspectives on a phenomenon.

The gathering of rich qualitative data is not possible in structured interviews which are essentially verbally administered questionnaires (Gill et al., 2008). A sequence of pre-determined, often closed, questions are asked in the same order with each participant, and there is little flexibility in terms of follow up questions or elaboration. When considering the topic of the current study, SP, and the lack of knowledge surrounding its implementation, the lack of scope for follow-up questions would cause issues, as emerging areas could not be further investigated. This mode of interviewing tends to lean towards quantitative research, with the major objective being to obtain comparable information from a potentially substantial number of subjects so that answers can be subject to statistical analysis (Edwards and Holland, 2013). This varies from the philosophical stance, critical realism, and the intensive research design adopted in this study, so structured interviews were, therefore, not suitable to address the needs of the research.

At juxtaposition to structured interviews, unstructured interviews collect rich qualitative data through observation, the collection of field notes, and interaction with participants. This adheres to the intensive research approach considered to be appropriate in the current study. Unstructured interviews more closely resemble a conversation than an interview (Gray, 2017). Although no research lacks complete structure (Mason, 1994), the conversation is controlled by the researcher as they skew it towards their interests (Jamshed, 2014). Due to the flexibility of this method, questions can be adapted or removed, which enables the interviewer to probe for deeper meaning and clarification, unlike the rigid form of structured interviews. However, collecting data using an unstructured interview can be time consuming, and the analysis of data is more laborious compared to structured interviews as responses cannot easily be compared due to the differing structure of the interviews. This was a particular issue in the current study as three different groups of participants were examined, therefore resulting in the potential for huge differences between groups without any structure to guide interviews. Thus, making unstructured interviews an unsuitable data collection method for the current study.

Due to the opportunity to gather rich information, and the ability to control the interview with the use of a guide whilst still allowing new information to be put forward by participants, semi-structured interviews were the most appropriate data collection method for the current study, and thus were adopted.

4.6.4.3 Mode of Interview

Semi-structured interviews can be conducted in numerous ways. Traditionally, interviews are conducted face-to-face with just the interviewer and the interviewee present (Bolderston, 2012, Kazmer and Xie, 2008). However, they could also be conducted on the telephone, electronically via an instant messaging programme, or as a group (Bolderston, 2012, Creswell, 2009). To meet the needs of the varying stakeholder groups involved, multiple modes of conducting the semi-structured interviews were adopted (face-to-face, telephone, and group interviews). These are discussed and justified in the following paragraphs.

Face-to-face interviews were deemed appropriate for use across all three stakeholder groups. They are a commonly accepted and popular method of interviewing, with many researchers detailing only face-to-face interviews when describing interviewing processes (Gerson and Horowitz, 2002, Merriam, 2009, Patton, 2015). During a face-to-face interview, the interviewer is able to read social cues such as voice and body language (Opdenakker, 2006). Shuy (2002) notes that it is easier to be face-to-face with someone when answering long, or potentially sensitive, questions and, also, that being face-to-face is often essential when interviewing the elderly, or those with health problems, to ensure ease of questioning. Both points relate to the current study as potentially sensitive questions

about job performance and mental health were asked, and some elderly or unwell participants were also involved.

A concern of face-to-face interviewing is that it restricts the geographical distribution of respondents due to the researcher's time and financial constraints (Minichiello et al., 2008). This can be overcome with the use of telephone or electronic interviewing. However, the latter method was deemed inappropriate for this research as there were concerns about participants' ability to use or access electronic devices because many service users involved were elderly or socially disadvantaged. Therefore, telephone interviews were adopted, alongside face-to-face interviews to reduce time and travel costs, and to improve inclusivity (Vogl, 2013, Zikmund et al., 2013). This also increased the geographical spread of data collected, therefore increasing the diversity of participants (Holt, 2010). Research has suggested that telephone interviews are shorter compared to face-to-face interviews, due to participants being less responsive (Irvine, 2011). However, due to the semi-structured format adopted, the researcher was able to probe if questions were not adequately answered, therefore overcoming this issue. Telephone interviews were also considered appropriate for use in the current study as some service users reported feeling anxious about meeting the researcher face-to-face, yet they still wanted to contribute to the research.

The final interview method used was group interviews. In a group interview, several individuals are questioned simultaneously (Denzin and Lincoln, 2008). These questions are designed to elicit a series of discussions during which participants can both answer questions posed by the researcher, and respond to statements made by other participants (Harvey and Land, 2017, Krueger and Casey, 2000, Teddlie and Tashakkori, 2009); this enables the researcher to gather the perspectives of multiple people at once (Kara, 2017), therefore making it comparably more time and cost effective. Due to their similar structure making analysis possible, group interviews were used in the current study alongside one-on-one interviews to obtain data from some groups of participants.

The ability to gather data from multiple people at once was valuable when collecting data from link workers who were often busy and were, therefore, interviewed as a group during normal meeting hours. Group interviews were also used to interview those service users who reported during recruitment that they would feel more comfortable in a group. In this situation, service users chose those they would feel most comfortable to be interviewed alongside. Whilst this resulted in varying group sizes, this was not considered to be an issue as there is no widely agreed upon size for group interviews, with many conflicting viewpoints available (Bloor et al., 2001). In addition, the current study did not aim to compare the views of individuals within each group. Instead it aimed to gather the perspectives of all participants, therefore the number of participants in total was of more

concern than the number in each group (Carlsen and Glenton, 2011). The current study instead focussed on reaching the point of saturation (Glaser et al., 1968).

4.6.4.4 Data Collection Methods Adopted

In summary, varied methods of conducting semi-structured interviews were adopted to meet the needs of each stakeholder group. Whilst face-to-face interviews were preferable, telephone interviews were adopted to address geographical challenges and participant concerns about participating in a face-to-face conversation with a stranger. Also, group interviews were adopted to meet the needs of the often-over-stretched link workers to ensure their participation had minimum impact on their working day. Group interviews were also utilised with any service users who requested this. Practical detail on how the interviews were conducted within each group is presented in Table 4.2.

<i>Participant group</i>	<i>Methods adopted</i>
General practitioners	Qualitative face-to-face semi-structured interviews that were expected to last up to 60 minutes. Interviews were undertaken at a mutually agreed time in a private room at either the participant's home or their place of work; the location was decided by the participant for their convenience. Participants were interviewed according to the interview guide (appendix 13).
Link workers	Qualitative face-to-face semi-structured group interviews that were expected to last up to 120 minutes. Interviews were undertaken at a mutually agreed time in a private room at the participant's place of work; this reduced the travel costs for participants. Where possible, interviews took place during the services' regular meetings. Prior to commencing the interview, participants were asked if they were comfortable discussing the topic with colleagues, and no issues were encountered. Participants were interviewed according to the interview guide (appendix 14).
Service users	Three different methods of data collection were utilised in the service user group to ensure data were collected at the participant's convenience; these were: interviews, group interviews, and telephone interviews. During recruitment, participants were asked to choose the method which best suited them. If this was a group interview, they were asked to coordinate the other members of the group. All interviews were undertaken at a pre-arranged time and at a mutually agreed location to reduce participants' travel costs; this was typically the participant's house or the location of their social intervention. During telephone interviews, the researcher ensured they were in a quiet private location to ensure confidentiality and participants were instructed to do the same. Participants were then interviewed according to the interview guide (appendix 15). Interviews were expected to take no more than 60 minutes.

Table 4.2: Methods of data collected adopted in each participant group

Information sheets (appendices 7-9) were made available via email to all participants at least two weeks prior to the agreed interview date. Before the interview commenced, participants were offered the opportunity to re-read the information sheet and were asked to sign a consent form (appendices 10-12). In telephone interviews, participants were given the opportunity to have the

information sheet read out to them if they did not have the information sheet to hand, and they were asked to provide verbal consent; this was obtained by the researcher reading out the consent form and the participants stating their name and consent at the end.

The interview methods adopted are supported by the chosen critical realist philosophical paradigm; this does not support any singular mode of inquiry. Instead it promotes the use of any technique required to address the research objectives (Blaikie, 2007, Sayer, 2000). Interviews allow critical realists to access both the attitudes and emotions of participants together with their individual accounts of events, experiences, and underlying social situations, which represent different levels of a multi-layered reality, as detailed in the critical realism paradigm. Realists understand interviewing to be the process of capturing a participant's perspectives through active engagement between interviewer and interviewee (Edwards et al., 2014), therefore making it appropriate for the collection of stakeholder perspectives in the current study. Whilst both the domain of the empirical (events experienced or observed) and the domain of the actual (events that are caused by mechanisms) can be revealed through interview techniques, the domain of the real (structures or mechanisms that create events) cannot be fully determined, only a partial picture can be established. The participant's reality should be considered in light of their social context, for example service user, link worker, or GP, as it is simply an interpretation of the reality they perceive, rather than an accurate description of the real domain.

4.6.5 Preparation of the Interview Guide

For semi-structured interviews, ahead of the first interview being conducted, an interview guide is developed (Bowling, 2014). This consists of a short list of guiding questions that are then supplemented by follow-up and probing questions during the interview dependent on the interviewee's responses (DeJonckheere and Vaughn, 2019, Kallio et al., 2016). To address the research aim, three stakeholder groups were interviewed (GPs, link workers, and service users). Each group had different experiences with, and roles within, SP, and, therefore, it was appropriate for different interview guides to be developed for each group (appendices 13-15). This section outlines the stages undertaken to develop the interview guides for this study.

The interview guides were developed through multiple stages. Firstly, they were informed by a review of the existing literature and the objectives of the study. Next, researchers who had conducted work in related areas, such as exercise prescriptions, were identified and contacted via email or ResearchGate (a networking site for scientists and researchers) to seek information about the interview guides used. It was helpful to compare ideas, questions, and structures against those used by others. Then the draft interview guides were considered by the researcher's supervisors

who shared insight from their experiences of working in this area. Finally, the first interview using each guide was considered a pilot to ensure clarity of the questions. The process of developing the interview guide was iterative, and edits were made to incorporate learning after each interview was conducted.

A fresh printed copy of the interview guide was taken to each interview to enable the interviewer to easily cross off questions or topics covered. Often it was found that questions were answered during conversation with the participant without them being asked, ticking these off the guide prevented repetition of information. Also, the interviewer was able to note down follow-up questions to be asked later in the interview.

Each interview began with the interviewer explaining the practicalities of the interview, for example, that the participant did not have to answer all questions asked if they did not want to, and that they could end the interview at any point without giving a reason. The interviewer reminded the participant that the interview would be recorded, asked them to review the information sheet, and sign two copies of the consent form: one for their records and one for the interviewer. The opportunity to ask any questions was offered before the interview began. In telephone interviews the same format was followed, but instead of signing a consent form, it was read aloud to participants and they were asked to give verbal consent. The interviews began with 'warm-up' questions that asked participants to explain what they understand 'SP' and 'social intervention' to mean. These questions were designed to investigate objective 5 and to focus the interview on the topic area.

Most questions focussed on the objectives of the research. The interview guides were largely similar as all participant groups could provide insight into all objectives, but each focussed on different aspects of SP in accordance with the participant groups' experience. For example, the GP interview guide contained questions around providing a social prescription in primary care, whereas the link worker and service user guides focussed on the social prescription journey. Questions were focussed around four main areas: understanding of SP and social interventions, attitudes towards SP and social interventions, data collection, the processes involved in SP. Questions relating to data collection were added to help explain the poor data quality found in study I.

As a closing question, participants were asked whether they would like to tell the interviewer anything else that had not already been covered; this provided the opportunity for participants to express their thoughts. After this, the recording device was switched off and participants were thanked. Participants were reminded that they would be sent a copy of the interview transcript to review via email, and the timescale to respond with any edits they would like made (two weeks).

4.6.6 *Data Preparation*

All interviews were recorded using a digital audio recording device, transferred onto a password protected laptop, and then transcribed using the intelligent verbatim method during which any identifiable information was removed. To ensure credibility, participants in all groups were given the opportunity to review the transcript of their interview. They were sent a copy of the transcript via email and asked to return any comments within two weeks. If no response was received, the interview was incorporated into the analysis as it was. This guaranteed clarity and allowed amendments to be made if necessary. The transcripts were stored in accordance with the Data Protection Act (1998). Participants were allocated an identification code under which their data were stored, which thus ensured anonymity. Codes were created using a number (beginning at one and increasing with each participant) and a letter which represented the stakeholder group that the participant was in. Codes were stored alongside the participants' names in a single secure file, therefore only the researcher was able to identify participants. Finally, the transcripts were imported into QSR NVivo 11 (a qualitative data analysis computer software package) to help manage the transcripts and the coding of the data.

4.6.7 *Data Analysis*

In qualitative research it is not always clear when data analysis begins (Stake, 1995); it is a fluid iterative process during which researchers loop back and forth through various stages as they progress (Creswell and Poth, 2017, Dey, 2003, Kodish and Gittelsohn, 2011). There are multiple approaches to qualitative data analysis (Braun and Clarke, 2006). Discourse, interpretative phenomenological analysis (IPA), and thematic analysis were all considered to analyse the data collected. Due to the focus of the research aims being on perceptions, discourse analysis was deemed to be unsuitable as this method considers the relationship between language and the social and cultural contexts in which it is used (Paltridge, 2012). Using discourse analysis a researcher can examine the physical aspects of an interaction, including linguistic styles, body posture, and other non-verbal communications to understand alternative accounts of language spoken (Harvey and Land, 2017, Ritchie et al., 2013, Silverman, 2015). Whilst the current study aimed to explore the language surrounding SP, it was not the focus of the research, instead the study aimed to gather the perspectives of participants, therefore discourse analysis was not considered to be appropriate.

To address the research aims, a method which examines individual perceptions was required. IPA is dedicated to the detailed exploration of personal meaning and lived experiences (Smith and Osborn, 2015, Tripathy and Tripathy, 2015). However, critical realist researchers are also interested in contextual factors, consequently analytical approaches that focus solely on lived experiences, such as IPA, were not appropriate for this study. Thematic analysis is one of the most common forms of

qualitative analysis (Guest et al., 2011), it is a flexible method for identifying, analysing, and reporting patterns, or themes, within a data set (Braun and Clarke, 2006, Braun and Clarke, 2013). It is a method used to analyse data, rather than a framework for conducting research, and it can be used alongside a variety of philosophical positions as it does not necessarily adhere to epistemological or ontological assumptions (Braun and Clarke, 2006, Braun and Clarke, 2019a). Thematic analysis is concurrent with critical realism as they both attempt to report the experiences, meanings, and reality of participants. The analysis method is able to acknowledge the ways which participants create meaning from their experiences, and consider the broader social context which influences this (Harper, 2011). It can both reflect reality, and discover the underlying assumptions (Braun and Clarke, 2006, Braun and Clarke, 2019a). Due to the flexibility of thematic analysis, its focus on participants' perceptions, feelings, and experiences (Guest et al., 2011), and that it is complementary to the critical realist perspective, it was deemed the most suitable data analysis method for the current study.

Braun and Clarke (2006, 2016) detail a six-phase approach to thematic analysis which was followed in this study. The current study collected large sets of detailed data from three different stakeholder groups. The data from each stakeholder group were analysed separately and then themes were combined and compared. Inductive thematic analysis was adopted to maintain the participants' voices and ensure the findings were grounded in the participant data. Subsequent deductive mapping of themes and subthemes onto the domains of the RMIC further interrogated the data and provided a deeper insight into SP as an example of integrated care. Each phase is detailed in the following sections.

4.6.7.1 Phase 1: Familiarisation with the Data

In this phase the researcher should immerse themselves in the data and begin to make notes on any initial observations. The data were collected by a sole researcher in this study, and this aided the beginning of familiarisation with the data. After this, each interview was listened to several times during transcription. Once transcribed, the interviews were read multiple times and initial observations were noted.

4.6.7.2 Phase 2: Generating Initial Codes

This phase involved the creation of initial codes from the data. Codes identify a feature of the data that appears interesting to the analyst (Braun and Clarke, 2006), and refer to "the most basic segment, or element, of the raw data or information that can be assessed in a meaningful way regarding the phenomenon" (Boyatzis, 1998: 63). In this study, codes were developed inductively ('bottom-up'), and, therefore, were strongly linked to the data themselves as opposed to applying a pre-existing coding framework as in deductive coding. The researcher worked systematically through

the transcripts in each group to code the entire data set using line-by-line coding. Data which demonstrated apparent 'deviant' or 'negative' cases, where a participant's opinions and experiences were in contradiction with those typically reported, were also coded to enhance rigour and validity (Mills et al., 2010). For ease of analysis, the data analysis computer programme QSR NVivo 11 was utilised, this aided the researcher in managing the large amount of data collected, was thought to be more efficient compared to a paper method, and more effective when considering retrieval of data (Bazeley and Jackson, 2013, Brod et al., 2009). NVivo allowed the researcher to create adjustable themes in a hierarchical structure, enabling themes to be easily altered throughout the analysis process.

4.6.7.3 Phase 3: Searching for Themes

The analysis was approached from a broader level of themes rather than codes (Braun and Clarke, 2006). The inductively derived codes from phase two were combined and grouped into themes; sub-themes were used to organise broader themes where necessary. Codes that did not appear to fit under a theme were temporarily grouped as 'miscellaneous' and returned to in a later phase (Braun and Clarke, 2006).

4.6.7.4 Phase 4: Reviewing Themes and Sub-themes

The themes developed in phase three were refined, and consequently those codes grouped under 'miscellaneous' were organised. As a deeper understanding of the data, and the relationship between themes and sub-themes, was gained as the analysis progressed, it was apparent that some themes required refinement. All codes, themes, and sub-themes were reviewed multiple times. When an area for improvement was identified the themes were re-worked; this included the combination, discarding, and creation of themes where necessary. Once themes had been re-arranged, they were checked to ensure they reflected the data extracts and the meaning intended to be conveyed. This process was repeated multiple times as the process of developing themes moves in analytic circles, with steps often overlapping, rather than a fixed linear approach (Braun and Clarke, 2006, Creswell and Poth, 2017). QSR NVivo 11 was used to support the development and re-arrangement of themes in this phase, also visual aids were used, for example, thematic maps.

4.6.7.5 Phase 5: Defining and Naming Themes

Once themes have been refined and finalised in phase four, they need to be defined. In this, the researcher needs to identify the 'essence' of each theme and determine what aspect of the data each theme captures (Braun and Clarke, 2006). In this phase, each theme and sub-theme was named and defined. At times it was challenging to define themes, which suggested that refinement was not yet complete, and the researcher moved back to phase four.

4.6.7.6 Phase 6: Producing the Report

The resulting themes, and the interpretation of these, are presented in chapter 6. In this stage the themes identified were mapped onto the domains of the RMIC, therefore adopting a deductive approach to analysis.

4.6.7.7 Non-Thematic Data Analysis

Most of the data collected in the current study were suitable to be analysed thematically, however, there were some elements that could not be captured within a thematic framework. These data were still considered to be important to address the research objectives, so a multifaceted approach was taken, the methods of which were informed by the needs of the data. For example, data on the types of social prescriptions and the reasons for them were collected through interviews. These data were categorically analysed and visually presented in a Venn diagram. The use of data driven methods for the remaining data ensured that all data collected were included in the analysis.

4.6.8 Ethical Considerations

This study was separated into three stakeholder groups, each requiring varying recruitment and data collection methods, so three separate ethical applications were made. These were reviewed and awarded a favourable ethical opinion by Birmingham City University Ethics Committee (see appendices 1-4).

All research has the potential to be harmful to both participants and researchers (Long and Johnson, 2007), so it is imperative that ethical guidelines are adhered to. Researchers should respect the rights and dignity of participants in their research, and participants should have confidence in the researchers; good research is only possible if there is mutual trust and respect between researchers and participants (Royal College of Nursing, 2011). This section discusses the ethical considerations made in this study.

Each participant was provided with an information sheet (appendices 7-9) at least two weeks prior to the agreed interview date to ensure they had time to consider the information; they were also given the opportunity to re-read the information sheet prior to commencing the interview.

Participants were then asked to complete a consent form (appendices 10-12). In telephone interviews verbal informed consent was obtained, whereby participants were read the consent form and asked to verbally agree to each point and then state their full name. This was recorded and transcribed, and then the consent section of the interview was separated from the interview transcript to ensure confidentiality.

For informed consent to be taken, information must be transparent and written in a language which the participant can understand (Royal College of Nursing, 2011). Information sheets were written in

lay language to ensure understanding. Prior to the start of all interviews, participants were given ample time to ask questions, and it was stressed that participation was voluntary, and that they could withdraw at any time. It was important that those who had been asked to participate by someone who held a position of authority over them, did not feel obliged to participate. For example, the manager of a SP service asking link workers to participate in a group interview. This effect was reduced by the researcher confirming the voluntary nature of the interview before it began and reiterating that participation did not impact them professionally.

To ensure participant confidentiality, the only information collected from participants was that which was required to contact them again, so that they could either take part in the research if undertaking a phone interview or review their transcripts. These details were kept confidential along with the study data. To ensure anonymity, each participant was allocated a code, under which all their information and study data were recorded. A form containing participant codes and names was only accessed by the researcher and was kept on a secure password protected server hosted by Birmingham City University. Any identifiable information was removed from the audio-recordings during, or after, transcription. All data collected were handled, stored, and disposed of in line with the Data Protection Act (Great Britain, 1998). Paper data were stored in a locked filing cabinet in Birmingham City University, any electronic data were stored on a secure server hosted by Birmingham City University, and files containing personal identifiable data were also password protected. Only the researcher and supervisors had access to the data. Data will be stored for a period of 5 years after completion of the doctoral programme after which they will be deleted or destroyed.

Due to all interviews taking place in a private room, and many in the participant's home, the issue of lone working had to be considered. To ensure the safety of the researcher, details of where the researcher was visiting were formally recorded with the supervisor. The researcher would inform their supervisor as they entered the property, and again when they left. If the researcher had not contacted the supervisor, the supervisor would contact the researcher to ensure their safety.

4.7 Rigour

Assessing rigour is an important step in research. It requires the researcher to examine the 'soundness' of the study in relation to its application, the appropriateness of the methods used, and the integrity of the conclusions drawn (Noble and Smith, 2015). In general, 'rigour' refers to the processes adopted to ensure the quality of the research produced (Laher, 2016). It is traditional to discuss rigour from a quantitative perspective and a qualitative perspective, not to combine the two (Tashakkori and Teddlie, 1998). This is considered appropriate as it is argued that the potential

issues in qualitative research are fundamentally different from those in quantitative research (Koch and Harrington, 1998, Rolfe, 2006). The subsequent sections discuss rigour in the context of each study.

4.7.1 Rigour in Study I

Rigour in quantitative research refers to the soundness or precision of a study in terms of planning, data collection, analysis, and reporting (Marquart, 2017). In quantitative research, rigour is typically measured through objectivity, reliability, and internal and external validity (Cypress, 2017).

Reliability relates to the consistency of a measure, meaning, if a study were repeated under the same conditions the results would be replicated (Heale and Twycross, 2015). Objectivity is described as the extent to which research findings are undistorted by the researcher's bias (Given, 2008).

Internal validity considers whether results are correct for the sample being studied (Patino and Ferreria, 2018). Finally, external validity examines whether the findings of a study are generalisable to other contexts (Andrade, 2018, Juni et al., 2001). Critical realism seeks to uncover patterns in a researcher's current understanding of a phenomenon under investigation in a certain time, setting, and population (Appleton and King, 2002). Consequently, within critical realism, external validity denotes that mechanisms that cause observable events in a certain context may also result in similar outcomes in different domains (Zachariadis et al., 2013).

To address rigour in this study, the methods chosen were described and justified, and the processes undertaken were clearly detailed in section 4.6. This supports reliability as it enables the repetition of the research, and objectivity as the suitability of the research design and how strictly this has been adhered to is apparent (Laher, 2016). The SP service from which the data were obtained was described in section 4.5.4. This is important for external validity as the context from which the data were collected from can be understood. Although, in a critical realist paradigm, it is recognised that results are a product of the specific context from which they are collected, so, whilst generalisations can be made, it must be noted that phenomenon is unlikely to be identical in other contexts (Zachariadis et al., 2013). A clear description of the SP service is also important for reliability as it further enables replication. Finally, internal validity was addressed through the exploration of the data obtained for errors, and by obtaining all service user data to ensure a representative sample (Zachariadis et al., 2013).

4.7.2 Rigour in Study II

Qualitative research is often criticised for lacking scientific rigour and transparency in analytical procedures compared to quantitative research (Rolfe, 2006). However, this assertion is often based upon measures used to establish validity in quantitative research, which may not be appropriate

(Long and Johnson, 2000). There is some controversy around whether or not the term 'rigour' is applicable to qualitative research (Golafshani, 2003). Nonetheless, some sort of measure to ensure rigour is required by researchers (Thorne, 2008). The purpose, philosophical positions, and methods used in qualitative research are inherently different from quantitative, so an alternative framework for establishing rigour is appropriate (Noble and Smith, 2015, Sandelowski, 1993, Silverman, 2015). Guba and Lincoln (1994, 1985) offered a framework focussed on 'trustworthiness' for demonstrating rigour within qualitative research, this framework consisted of four criteria: credibility, transferability, dependability, and confirmability.

Credibility is considered to be the qualitative equivalent of internal validity criteria, it deals with how congruent the study's findings are with reality, and whether the results are believable from the participants' perspective (Harvey and Land, 2017, Merriam, 1998, Trochim and Donnelly, 2006). Lincoln and Guba (1985) argue that ensuring credibility is a vital factor in establishing trustworthiness, the most appropriate judges of the credibility of results are participants. Member checks were implemented in the current study to address credibility. This involved asking participants to read their interview transcripts to ensure these were an accurate reflection of their perspectives (Creswell, 2009, Pandey and Patnaik, 2014). Guba and Lincoln view member checks as the most critical technique for establishing credibility (1989). Furthermore, Pawson and Tilley (1997) contend that credibility can be improved if researchers recognise that different stakeholders have different perspectives. Consequently, to promote credibility, this study collected data from multiple stakeholder groups and compared and contrasted findings. This is also a type of triangulation. Triangulation is defined as the use of more than one method or source of data in the study of a phenomenon (Bryman and Bell, 2015, Gerrish and Lathlean, 2015, Olsen, 2004). It is a validity procedure in which researchers search for convergence between several different sources of information (Creswell and Miller, 2000). This allows for diverse viewpoints to be considered to more accurately study a phenomena (Casey and Murphy, 2009, Castro et al., 2010). Denzin (1989) describes three types of data triangulation: time, space, and person; the most relevant of which to the current study was 'person'. Person triangulation is when a researcher collects data from more than one group of individuals. For example, in this study, data were collected from service users, link workers, and GPs.

Transferability relates to external validity, it refers to the degree to which results can be transferred to other contexts (Anney, 2014, Merriam, 1998). It is difficult to establish transferability in qualitative research, so it is important that researchers convey the boundaries of their study (Marchionini and Teague, 1987); this has been noted in the discussion chapter of this thesis. There are techniques to increase transferability; these are thick description and purposeful sampling

(Bitsch, 2005). This study adopted purposive sampling methods, which involved selecting participants that best addressed the research objectives (Teddlie and Yu, 2007). This meant that key stakeholders who were particularly knowledgeable about the phenomenon under investigation could be focussed on to maximise the information gathered from a few participants (Anney, 2014).

Dependability describes the stability of findings over time (Bitsch, 2005). It relates to reliability in quantitative research (Rolfe, 2006). Fidel (1993) notes that the changing nature of phenomenon under qualitative study can make dependability difficult to ensure. The results are tied to the situation the data were collected in (Florio-Ruane, 1991); participants' responses may vary from day-to-day due to their mood, the situation around them, the researcher's character, and so on. Despite difficulties meeting the dependability criterion in qualitative work, ensuring that repetition of the study is possible can increase adherence (Shenton, 2004). The methods adopted are discussed in section 4.6.4 **Error! Reference source not found.**, and interview guides are available in appendices 13-15, therefore supporting repeatability. Dependability may also be achieved through the use of overlapping methods, such as the group and individual interviews used in the current study; this is a type of methodological triangulation (Guba, 1981). Additionally, Lincoln and Guba (1985) emphasise the close relationship between dependability and credibility, arguing that a demonstration of credibility supports dependability (Shenton, 2004). This study utilised methods to achieve credibility, alongside overlapping methods to address dependability.

Confirmability is concerned with establishing that interpretations of findings are clearly derived from the data, and are not an example of researcher bias (Tobin and Begley, 2004). Confirmability was difficult to achieve in the current study due to it being run by a single researcher, therefore, investigator triangulation could not be carried out. However, Miles and Huberman (1994) argue that confirmability can be addressed by the researcher admitting their own predispositions. Thus, the researcher's beliefs and underpinning motivations should be acknowledged, explanations for utilising one approach over others should be given, and weaknesses in the techniques employed should be admitted (Shenton, 2004). The current study addressed the points made by Miles and Huberman in chapters 2 and 4; this attended to confirmability.

4.8 Chapter Summary

First, this chapter presented the aims and objectives of the present study. Following this, the suitability of the positivist, interpretivist, and critical realist philosophical paradigms to meet the demands of the objectives was debated. Critical realism was identified as the most suitable paradigm and its applicability to the research was discussed. It was identified that a mixed methods design was required to address the research objectives and align with critical realism. In accordance

with the chosen critical realist philosophical perspective, the RMIC, and to meet the demands of the research objectives, a convergent parallel mixed methods research design was adopted. The quantitative element of this, 'exploring the service user population of a SP service' (study I), was undertaken utilising pre-existing data. The qualitative element, 'understanding key stakeholder's experiences of delivering or receiving SP' (study II), was undertaken utilising differing interview techniques (telephone and face-to-face interviews) with multiple stakeholder groups. This chapter presented the data collection and analysis methods adopted in each study, discussed the ethical considerations made, and detailed how rigour was addressed.

Chapter 5: Study I Results

5.1 Introduction

This chapter presents the findings of study I. The methods detailed in section 4.5 were used to collect secondary service user data from a SP service to address the study's aim: 'to explore and quantify the underlying contributing factors to requiring a non-medical health intervention within a single service user population'. The data were obtained from a SP organisation based in a large conurbation in England described as a deprived area. In this chapter, firstly, issues experienced with data collection are discussed before the final dataset obtained is presented. Following this, the poor data quality of the data obtained is highlighted and the implications of this are reviewed. Then, some basic demographic factors and process data from the data obtained is presented for variables which were completed for a relatively high number of service users. Finally, explanations for poor data quality are explored before the findings from study I are discussed.

5.2 Data Collected

The participating service used an electric data storage system that was created specifically for the service by an external partner. The data storage system claimed to enable robust data collection and measure social, environmental, economic, and wellbeing outcomes using an approach that tracks their progress in terms of social impact, social value, and social capital. Service user data were recorded on the system by five link workers who obtained information during initial assessments. Data were collected in varying formats (e.g., paper notes) and input it onto the system later. Some data were automatically populated, reference numbers for example, whilst others were input via dropdown menus. The specific contents of the dataset were largely unknown to the researcher; however, the service manager was confident that the data would be suitable to address the research aim. Accordingly, the service agreed to provide service user data from their data storage system (appendix 5). An appointed employee from within the participating service extracted all data collected on all service users since the inception of electronic record keeping (October 2012) and removed any identifiable variables (e.g., name and address). No inclusion or exclusion criteria were applied. These data were provided to the researcher in July 2016 on multiple Excel spreadsheets. The data collected are discussed in detail in the following sections.

5.2.1 *First Dataset*

In the first instance data were collected from 1,421 service users across 34 variables in July 2016. On initial viewing it was apparent that there were significant data quality issues. There were a large amount of missing data. The overall completeness of the data obtained was 54.6%, with some variables being completed in less than 10% of instances. There was also a lack of clarity over some

variables. For example, 'safety' was one of the 'social, environment, economic, and wellbeing outcomes' collected, however, there was no definition of this variable and the scoring system for it was ambiguous (supported, self-managed, not applicable, and unmanaged) making it challenging to draw any meaningful conclusions from the variable. These issues were brought to the attention of the service manager. The data storage system produced automatic reports, consequently the manager had not viewed the raw data and was, therefore, previously unaware of the data quality issues.

The service manager was concerned about the poor data quality and worked with the researcher and colleagues to identify areas for improvement. They committed to retrospectively completing missing data, running staff training on the importance of proper data collection, and clarifying the unclear variables and scoring systems. It was decided that the data for this research would be collected again a year later to benefit from the anticipated increased data quality resulting from the proposed changes. Due to the volatile nature of the SP services in terms of funding and staffing, the decision was made to obtain data on a quarterly basis to ensure the relationship with the service was not lost before new data could be obtained. The first data set was collected in July 2016, following this, new data were requested and aggregated quarterly until May 2017 when the relationship with the participating organisation was lost due to staff changes.

5.2.2 Final Dataset

All service user data since the inception of electronic record keeping (October 2012) were collected from the SP service in May 2017. Identifiable variables such as name and address were removed prior to collection. The final dataset contained information on 2,155 service users across 34 variables. The variables collected, and an example of the information contained within each is presented in Table 5.1.

5.2.3 Data Quality

Completeness is the most commonly assessed dimension of data quality (Weiskopf and Weng, 2013). An examination of data completeness is performed to ensure that a dataset is sufficient for its intended use (AHIMA Data Quality Management Task Force, 1998, Menachemi and Collum, 2011). There are different conceptualisations used to determine the completeness of health-based datasets, but, generally, completeness is used to refer to whether or not the whole truth about a patient is present in the data, and to data availability or missing data (Weiskopf and Weng, 2013). Commonly, instead of looking at the overall completeness of a dataset, elements of it are examined in consideration of the task underway. Therefore, the researcher determines whether the data are complete enough for a specific purpose (Alwhaibi et al., 2019, Jensen et al., 2009, Linder et al., 2009,

Weiskopf and Weng, 2013). Despite plans for the participating service to improve the quality of their service data in the year since the first dataset was obtained, data quality issues persisted. The overall completeness of the final dataset was 54.4%, and no service users had all cells completed; this presented issues for the planned analysis. The variables collected are listed in Table 5.1 alongside examples of the information included and the completeness of each. Before analysis began, each variable was considered in relation to its completeness and the relevance of the information included.

The variables of particular interest were the 11 measures of social, environment, economic, and wellbeing outcomes; however, these were completed in just 18.18% of instances on average. It was clear from examination of the data storage system that only one link worker was completing this section. Informal investigation with the link workers revealed that they were unclear as to what the variables measured and how to complete them. This was further evident from the vague input options available: supported, self-managed, unmanaged, and, not applicable. When examining data quality, the AHIMA Data Quality Management Task Force (1998) highlight the importance of clear definitions and acceptable input value so that current, and future, data users know what the data mean. The ambiguous information contained in these variables, and the lack of complete cells, meant that they could not provide insight into the research objective.

The average completeness of descriptive information was 63.6%, however this ranged from 3.6% to 99.7%. Whilst the contributory factors to requiring a non-medical intervention could not be quantified from descriptive information alone, especially that of poor completeness, the service user population could be described, and commonalities could be deduced. However, this type of examination of the service user population is not novel, many other service evaluations have described their service user population (Carnes et al., 2017, Dayson et al., 2016, Dayson and Bennett, 2016a, Dayson and Leather, 2018, Healthy Dialogues, 2018, Kimberlee, 2016, Liles and Darnton, 2017). Furthermore, the objective of this study was to provide a deeper level of analysis, and this could not be addressed using this descriptive information alone.

Information which could have provided insight into the underlying contributing factors to requiring a non-medical health intervention were the reasons for referral provided by the referrer (e.g., GP) and link worker. The referrers completed this information in 98% of instances, however the link workers only completed this for 53.9% of service users. Whilst the information provided by the referrer is useful, link workers spend substantially more time with the service user so are likely to uncover further non-medical needs (Healthy Dialogues, 2018). Of the total number of service users, 53.6% had both the referrer and link worker referral reason variables completed. An analysis of not only

the reasons for referral, but also a comparison between the reasons cited by both groups would have provided insight into the service user population. However, the reasons for referral are well-cited in the literature, this research instead aimed to provide a deeper understanding of the service user population and provide insight into the factors which might lead an individual to experiencing these issues. The final type of information contained in the dataset obtained was registration information. These variables contained registration and ID numbers useful to the SP service, but not the research objective.

<i>Variable</i>	<i>Example SU data (fictional)</i>	<i>Type of information</i>	<i>Percentage of complete cells (%)</i>
Action plan ID	114	Registration	100
Presenting issues ID	525		100
Reference number	234		100
Registration record type	Service user		100
Declined service?	No		99.7
City/Town	Basingstoke	Descriptive	98.1
Local authority	Hampshire		72.4
Post code	RG21		98.7
Name of GP	D Smith		94.7
Name of GP practice	Basingstoke Medical Practice		99.5
Gender	Female		99.7
Service user age	62		99.5
Marital status	Married		60
Disability	Visual impairment		38.4
Learning disability	Dyslexia		3.6
Education	Entry level		10.4
Employment	Retired		23.5
Ethnicity	White English		67
Caring responsibilities	No caring responsibilities		24.8
Referrer indicator	Frequent presenter, isolation		Referral
Link worker indicator	Frequent presenter, isolation, household issues	53.9	
Source of referral	GP	100	
IP Support Provided	Advocacy	6.6	
Safety	Unmanaged	Social, environment, economic, and wellbeing outcomes	18.4
Sexual health	Self-managed		18.1
Drugs and alcohol	Not applicable		17.9
Education	Not applicable		18.3
Housing	Unmanaged		18.6
Life skills	Self-managed		16.3
Mental health	Unmanaged		18.7
Offending	Not applicable		18.3
Physical health	Self-managed		18.4
Finance	Self-managed		18.7
Employment	Not applicable	18.3	

Table 5.1: Variables collected, example data, and the completeness of each variable

5.2.4 Implications of Poor Data Quality

Poor data quality is not uncommon in SP services, in fact, missing data are cited as a frequent issue experienced when conducting evaluations of services (Bickerdike et al., 2017). The issues with data completeness, and the ambiguous nature of the social, environment, economic, and wellbeing outcomes created challenges for the analysis of the data. Inferential statistics were not possible as no service users had all 34 variables completed, and there was insufficient data to replace missing

values. To address the data analysis challenges, variables completed in less than 80% of instances were removed. However, this resulted in insufficient data to address the research question; particularly as data which was thought to provide the best insight into the research question, the social, environment, economic, and wellbeing outcomes, were removed because of this. Despite plans for the service manager to reduce the ambiguity around these variables, this had not been completed, so, regardless of completeness, the data provided little insight into the research questions. Due to the poor data quality, the level of analysis required to address the research question was not possible, and no meaningful results could be gained from analysis of the data.

5.3 Results

Whilst it was not possible to perform the planned analysis on the dataset, and, therefore, the research objective could not be met, some demographic and process information was investigated if it were completed in >95% of instances. This information provided some insight into SP in practice and the service user population. Also, the information contained in some variables (e.g., reasons for referral and outcome) could be compared against that gained from the qualitative interviews in study II. However, this type of examination of the SP service user population is not novel, many other service evaluations have also described their service user population (Carnes et al., 2017, Dayson et al., 2016, Dayson and Bennett, 2016a, Dayson and Leather, 2018, Healthy Dialogues, 2018, Kimberlee, 2016, Liles and Darnton, 2017); furthermore the following results do not address research objective 1, and also do not provide any novel insight into SP.

5.3.1 Demographics

The only demographic variables that provided insight into the service user population and had, what the researcher considered to be sufficient completeness (>95%), were age, gender, and living conditions (determined by GP practice); the information contained in these variables is presented below. The data gathered on ethnicity are also presented as this information was considered important in relation to the reasons for poor data collection.

5.3.1.1 Age and Gender

Due to gaps and errors in the data obtained, the age and gender data presented are representative of 98.5% of the total number of service users. Of these service users, 58.9% were female and 41.1% were male. Service users' ages were divided into categories. Figure 5.1 displays the distribution of males and females in each age category. The number of females in each age category steadily increases until the age category 76-85, after which there is a slight decrease, followed by a sharp decline at ages 96-105. A slight increase in the number of males in each age category can be seen in the categories up to the age of 55. There is then a sharp increase in the number of male service

users in the 46-55 age category, followed by a small decline in the 56-65 category. Following this, the number of male service users follows the same pattern as the female service users with increasing numbers until the ages of 86-95, where a slight decline occurs, followed by a sharp decline at ages 98-105.

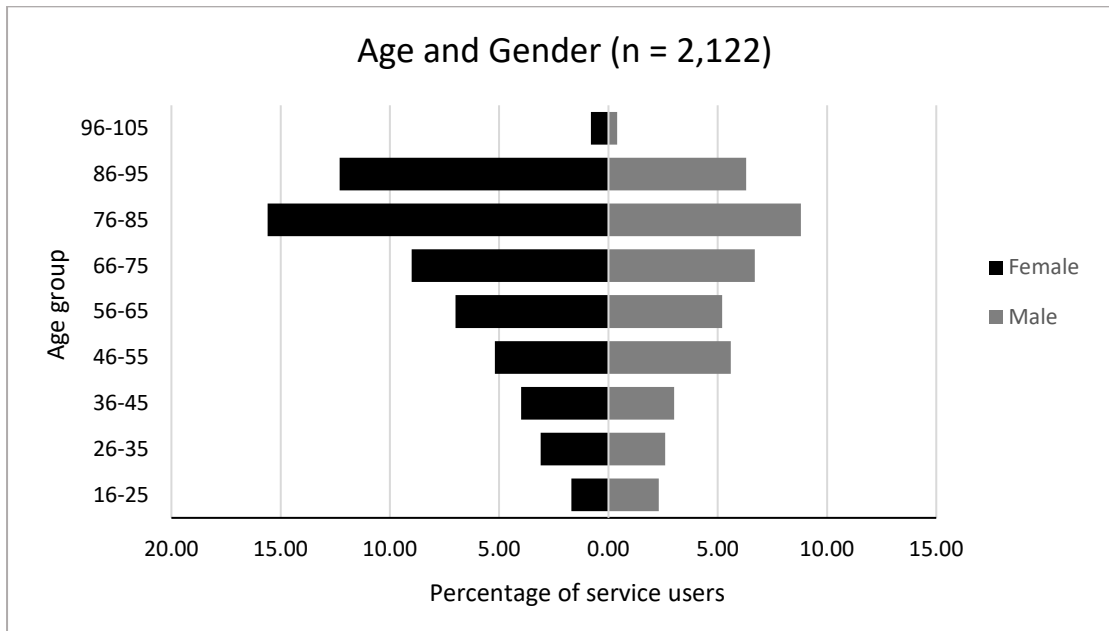


Figure 5.1: Distribution of males and females across age categories.

5.3.1.2 Ethnicity

Ethnicity data were completed for 67.0% of the total service user population. Of the service users with completed ethnicity data, 88.5% were 'White English/Welsh/Scottish/Northern Irish/British'. This is consistent with the population of the area from which the data were collected, for which census data reports that White British people form 88.5% of the population (Office for National Statistics, 2011). The remaining ethnicity percentages are broadly consistent with the population of the data collection area, except a greater proportion of service users are Pakistani compared to the area population. However, the ethnicity distribution cannot be fully understood without the ethnicity data for the remaining 33% of service users. Table 5.2 details the distribution of service users in each ethnicity category.

<i>Ethnicity (n = 1,443)</i>	<i>Percentage of service users</i>	<i>Percentage of area population (n= 312,925)</i>
White English/Welsh/Scottish/Northern Irish/British	88.5	88.5
White Irish	0.2	0.4
White Gypsy or Irish Traveller	N/A	0.1
Any other White background	0.6	1.0
Pakistani	1.6	3.3
Caribbean	1.1	0.8
Bangladeshi	N/A	0.1
Indian	0.8	1.8
African	0.6	0.5
Any other Asian background	0.6	0.5
Any other Black / African / Caribbean background	0.4	N/A
Any other ethnic group	0.3	0.2
White and Black Caribbean	0.3	1.1
Any other Mixed / Multiple Ethnic background	0.2	0.2
Arab	0.2	0.4
Chinese	0.1	0.3
Other	0.1	0.2
White & Asian	0.1	0.4
Other black	N/A	0.2
Prefer not to say	0.1	N/A
Not specified / Not known	4	N/A

Table 5.2: The distribution of service users' ethnicity compared to the area population

5.3.1.3 Living Conditions

The postcode of the general practice the service user received their referral from was used as a proxy for their home postcode, with the assumption that they had attended a general practice within proximity of their home. Each postcode was searched for within the Index of Multiple Deprivation data for the large conurbation from which the data were collected. These data represent the decile of deprivation that small areas, known as LSOAs (Lower Super Output Area), have been categorised into. There are 201 LSOAs in the data collection area, of which, service users were in 47. General practice information was completed for 99.4% of service users. Of these, 31.2% were in the 'least deprived' areas compared to 68.7% which were in the 'most deprived' areas. This pattern is consistent with the LSOAs of the data collection area, as there are a higher percentage of 'most deprived' areas compared to 'least deprived'. Figure 5.2 compares the percentage of service users and LSOA areas in the most and least deprived categories.

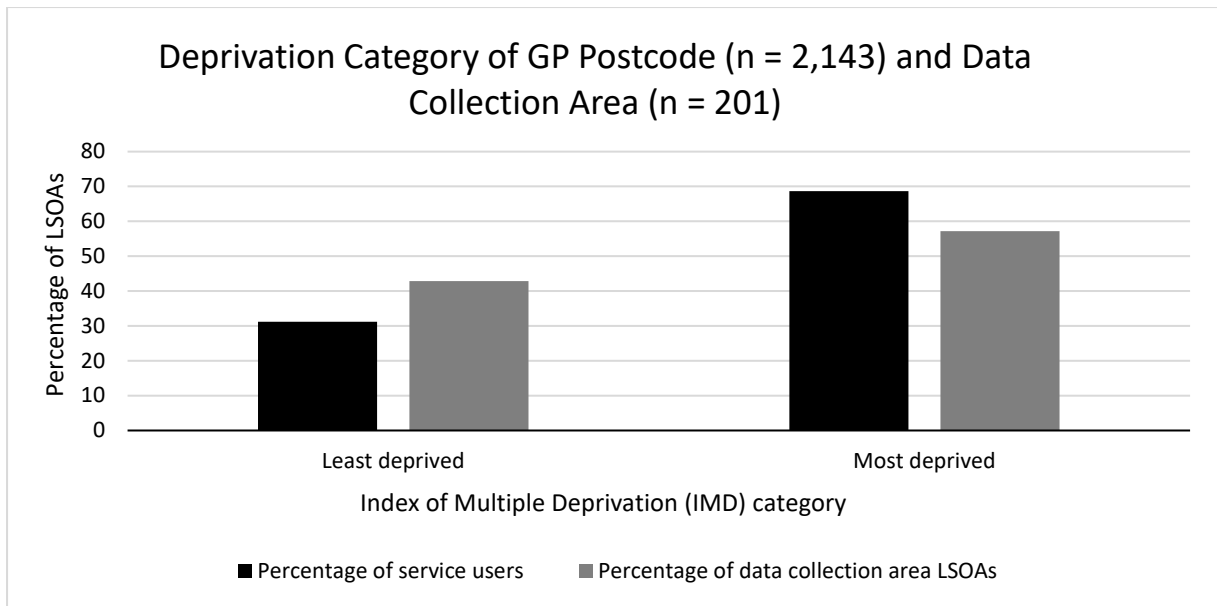


Figure 5.2: The distribution of service users and LSOAs in the most and least deprived deprivation indices categories

Figure 5.3 displays the spread of service users across the decile of deprivation categories. The most common category of deprivation was ‘50% most deprived’, which is inconsistent with the most common decile of deprivation in the data collection area (‘30% most deprived’). The next most common category was ‘20% most deprived’, followed by ‘10% most deprived’. The least common category was ‘10% least deprived’, followed by 30% least deprived. This is inconsistent with the data collection locality (‘40% least deprived’). A chi-square test of independence was performed to examine the relationship between deprivation category and use of the SP service. A significant interaction was found ($\chi^2(1) = 1.39 \times 10^{-27}$, $p < .05$). This indicates that there is an overrepresentation of those from the most deprived areas accessing the SP service.

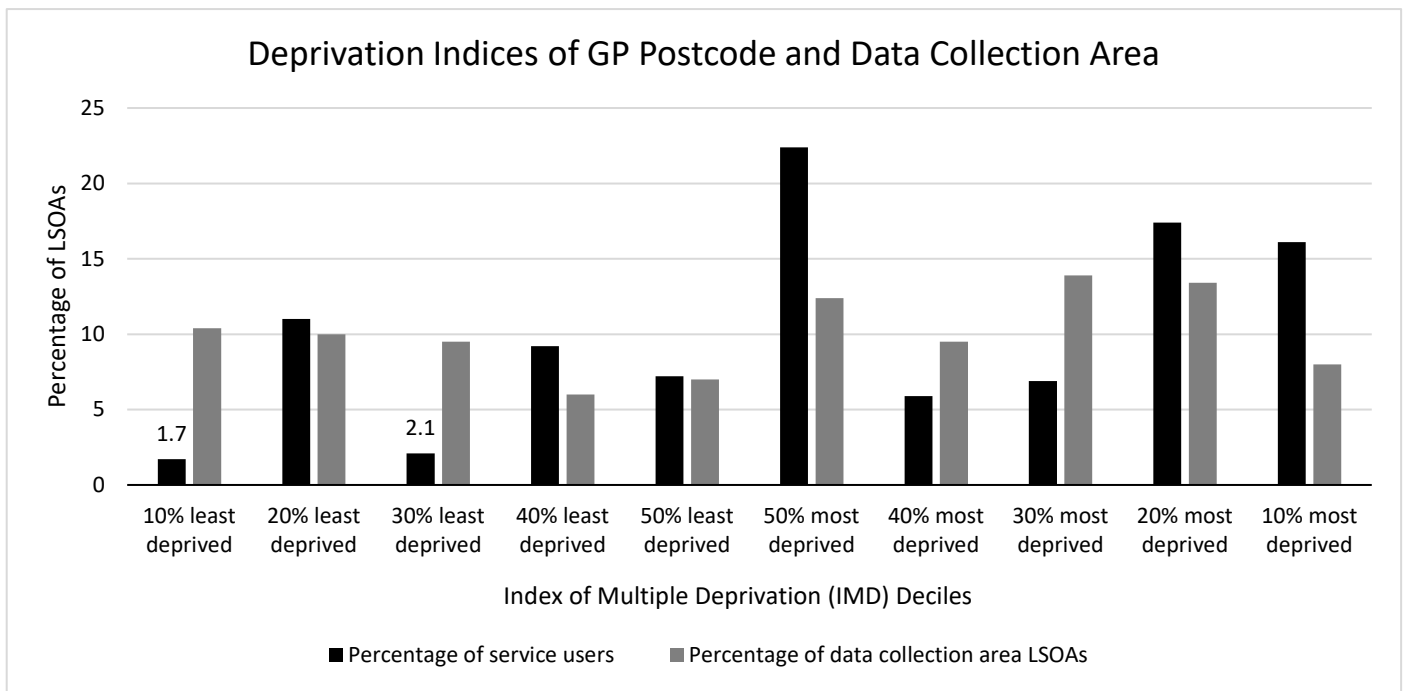


Figure 5.3: Comparison of the distribution of service users and LSOAs across the levels of deprivation indices

5.3.2 Process Data

Some of the variables examined were relevant to the processes involved in SP. For example, where the service user received a referral from, the reasons for this, and the outcome. These variables are detailed in the following sections. Whilst the link worker referral information was only completed in 53.9% of instances, this information was considered important for comparison against the GP indicators.

5.3.2.1 Referral Source

The source of referrals received by the SP organisation was recorded for 100% of service users. Table 5.3 shows the percentage of service users referred by each source. The primary source was GPs which accounted for 63.9% of all referrals. The second most common source was Multi-disciplinary Teams (MDTs) which accounted for 15.9% of referrals. The least common sources of referrals were 'Careers Co-Ordinator', 'Health Hub', 'link worker, and 'Practice manager', each of which accounted for 0.1% of referrals.

<i>Source of referral</i>	<i>Percentage of service users (n = 2,155)</i>
GP	63.9
MDT	15.9
Mental health	10.3
Community nursing	3
District Nurse	2.6
Other	1.3
Self-referral	1
Adult social care	0.6
A & E	0.3
SP	0.3
Hospital staff	0.2
Respiratory assessment service	0.2
Carers Co-ordinator	0.1
Health Hub	0.1
Link worker	0.1
Practice manager	0.1

Table 5.3: The percentage of referrals received from each source

5.3.2.2 Reasons for Referral

The reason for referral was provided by the referrer for 97.9%, and by link workers for 53.9% of service users. Of the total number of service users, 53.6% had both the referrer and link worker referral reasons' variables completed. Both referrers and link workers recorded the same reasons for referral for 31.7% of these service users. On average, referrers recorded 2.1 referral reasons per service user and link workers recorded 3. Data were extracted as a single variable that had multiple content therefore making analysis challenging. The number of times each referral reason was provided, in relation to the completeness of the variable, was calculated for both referrers and link workers. The comparison between the 2 groups is displayed in Figure 5.4. The frequency of use of each of the referral reasons is consistent between the 2 groups. In both groups the most common reason for referral was 'isolation', and the least common was 'lack of basic literacy and numeracy'. The largest difference between groups found was in the 'household issues' and 'long-term health issues' variables. The link worker used these reasons for referral in 15.7% and 15.6% more cases compared to referrers. Only 1 reason for referral was cited more frequently by referrers (3.4%) than link workers. This was 'Other'.

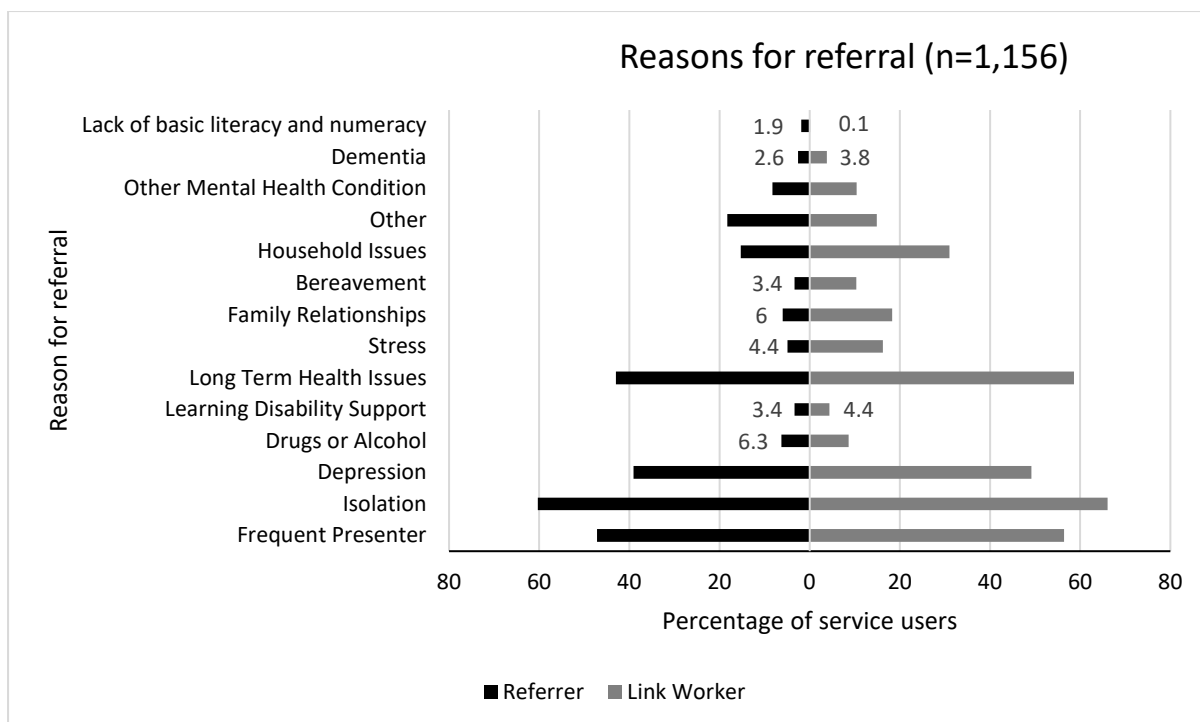


Figure 5.4: Reasons for referring service users by GPs and link workers

Cohen's Kappa was calculated to determine if there was agreement between the GPs' and link workers' reasons for referral. Due to service users having multiple reasons for referral, agreement was calculated for each reason separately. Table 5.4 details the results of the analysis. The interpretation of each result indicates to what extent GPs and link workers agreed on the reasons for referral. The most common level of agreement was 'substantial' followed by 'moderate' suggesting that there was a high level of inter-rater reliability between the two groups.

<i>Reason for referral</i>	<i>Kappa value</i>	<i>Interpretation</i>
Dementia	.788	Substantial agreement
Learning Disability Support	.768	Substantial agreement
Frequent Presenter	.729	Substantial agreement
Drugs or Alcohol	.683	Substantial agreement
Depression	.625	Substantial agreement
Long-Term Health Issues	.618	Substantial agreement
Other Mental Health Condition	.602	Moderate agreement
Isolation	.547	Moderate agreement
Household Issues	.440	Moderate agreement
Bereavement	.426	Moderate agreement
Other	.415	Moderate agreement
Family Relationships	.383	Fair agreement
Stress	.367	Fair agreement
Lack of Basic Numeracy and Literacy	.000	Agreement equivalent to chance

Table 5.4: The kappa values and interpretation for each reason for referral

5.3.2.3 Outcome

The type of referrals made by the link workers were recorded for 100% of service users. In total, 439 different referral options were recorded and, on average, 3.3 referrals per service user were given. The referrals were then manually coded into 1 or more of 5 categories: Support / Advice, Physical activity, Social, Hobbies, and Education. Figure 5.5 shows the percentage of referrals which were categorised as each type. 'Support / Advice' was the most common type, with 63% of referrals containing some elements of support or advice, and 'Education' was the least common, with just 8.7% of referrals having an educational focus. Examples of the referrals provided by the SP link worker within each category are displayed in Figure 5.6.

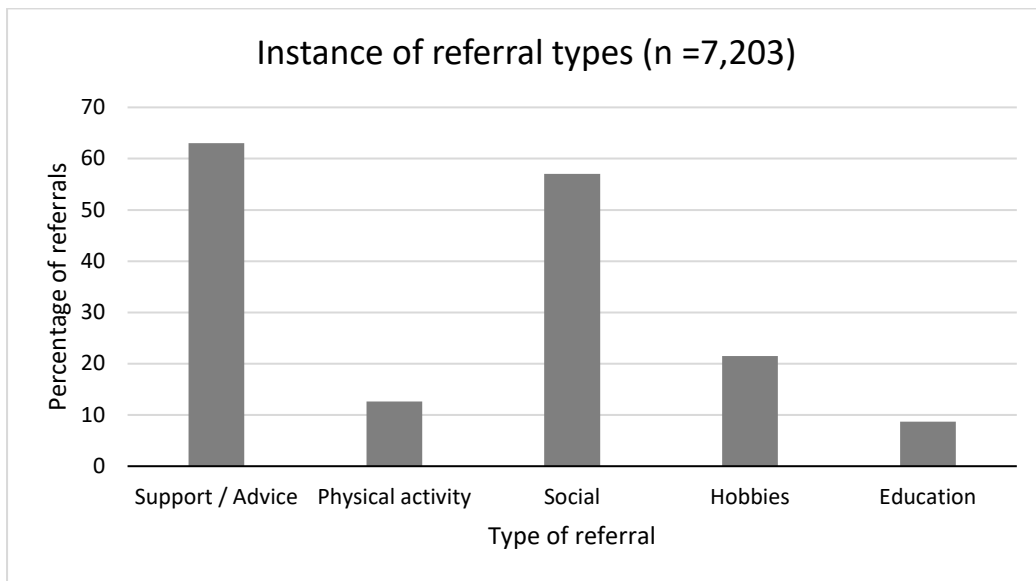


Figure 5.5: Percentage of each type of referral

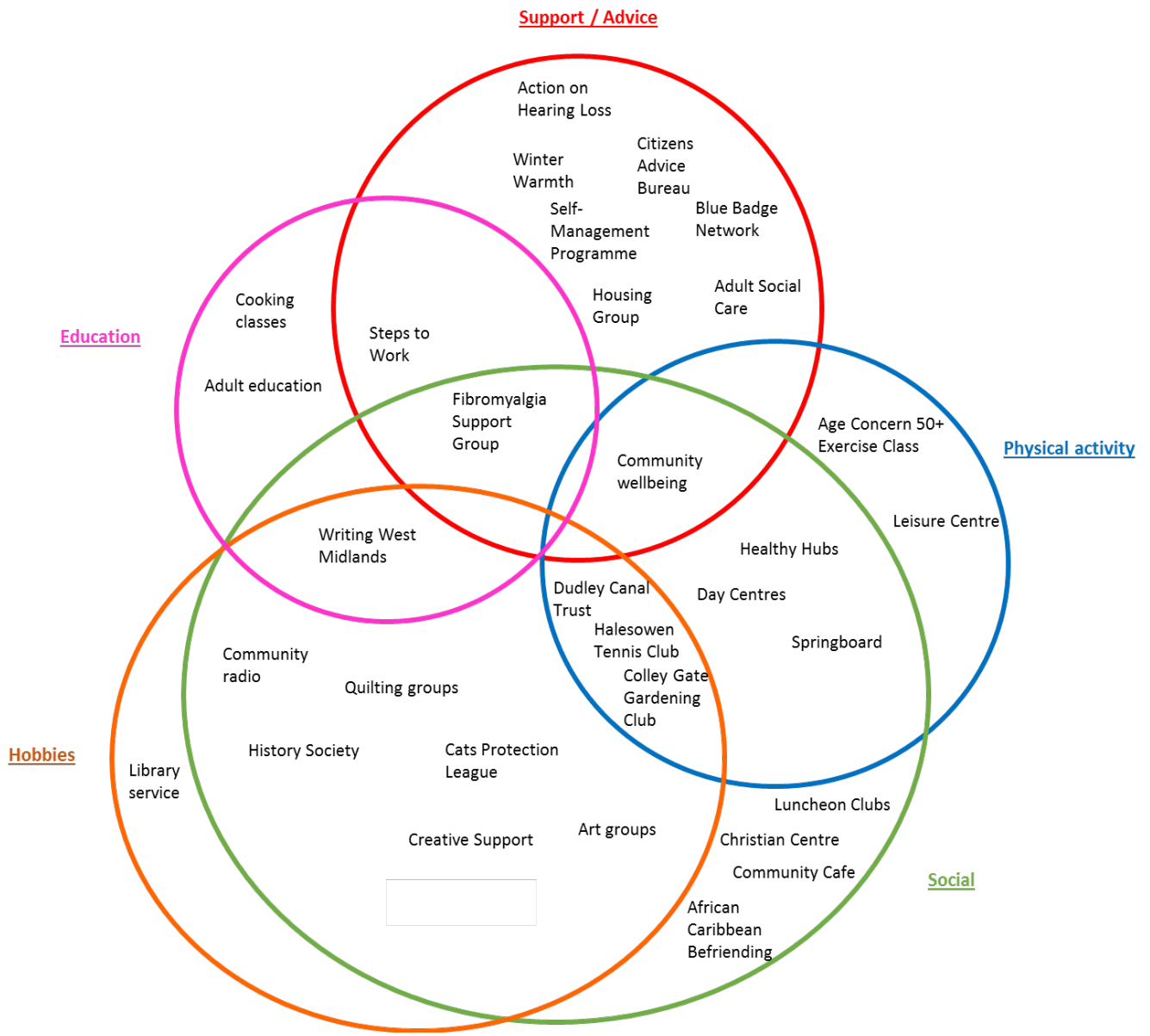


Figure 5.6: Venn diagram depicting examples of the five categories of SP referrals

5.4 Explanations for Poor Data Quality

Whilst the reasons for poor data collection undoubtedly differ between variables and services, an informal investigation with those who completed the data obtained and the service manager was conducted to explore the potential reasons for the poor quality. This provided some explanations for the poor data: lack of understanding of the importance of data, sensitivity, poor system design, and practical issues with data collection. These are discussed in detail in the subsequent sections.

5.4.1 *Lack of Understanding of the Importance of Data*

The poor quality of the data, and the ethical concerns with the way in which it is collected, raise questions about link workers understanding of the importance of data. Whilst the reasons for poor data collection undoubtedly differ between variables and services, a lack of staff understanding on the importance of correct data collection is likely to have an overarching impact. Good quality service user data are important in SP to understand the socioeconomic status and deprivation of service users as these are closely linked with health (Wang and Geng, 2019). Socioeconomic status is a complex and multi-faceted measure of factors such as an individual's income, occupation, and education attainment (Miner et al., 2014). It draws together many of the factors considered in Dahlgren and Whitehead's model of the SDH (1991). Alongside socioeconomic status, deprivation can be attained using the Indices of Deprivation. This is a comparative measure of deprivation for the area in which an individual lives that also considers measures such as health, crime, housing, and environment (Department for Communities and Local Government, 2015).

Studies have identified that those with lower socioeconomic status and increased deprivation typically experience a greater number of negative impacts on their health compared to those from more affluent areas. For example, individuals with low educational attainment and low income, both of which are indicative of low socioeconomic status and increased deprivation, have been found to have poorer health literacy (Wagner et al., 2007), therefore may be less likely to understand the need to lose weight (Kennen et al., 2005), and, increased weight has an impact on a number of poor health outcomes (Coupe et al., 2018). SP can be used to address the negative impact of low socioeconomic status and deprivation, for example through the improvement of poor housing provision. Individuals from low socio-economic groups typically have poorer health outcomes than those from more affluent groups (Coupe et al., 2018), and have poorer outcomes following interventions (Hiscock et al., 2011). Therefore, social interventions, such as SP, need to understand the user population to support the development of appropriate services to enable maximum benefit; without sufficient data this cannot be achieved.

Informal discussions with link workers from the data collection service revealed that some did not understand why service user data were important, or its usefulness in research, with many disputing why certain variables were requested. For example, ethnicity data were only completed in 67% of instances, and, therefore, the distribution of ethnicities reported is not considered to accurately reflect the service user population. Informal investigation with link workers revealed that they did not consider ethnicity to be of relevance in this instance. This belief is supported by other research which has found that the belief that ethnicity data has no relevance in healthcare is a reason for its poor collection (Wynia et al., 2010). When the completeness of the data was considered against the link worker that input it, it became apparent that some link workers valued certain variables over others. For example, some consistently recorded marital status, whereas others left this blank in most cases. Wagner et al. (2009) highlight the importance of those collecting healthcare information understanding the importance of ensuring data quality. This is because healthcare decisions, both at a local level and a wider policy level, are driven by data and information, and therefore, poor quality data means that decisions made cannot accurately reflect practice.

Considering the novelty of the link worker role, the position is not clearly defined, and, therefore, the necessary qualifications for the role vary between services. Consequently, many link workers did not have any data collection experience, and therefore may lack an understanding of the importance of data quality. To ensure that these data are collected accurately, training of all levels of staff in SP service is required. This training may include: the usefulness of these data for detecting and addressing healthcare needs, the importance of collecting these data, how they will be used, how they should be collected, and how concerns of service users (e.g., relating to data protection) can be addressed (Hasnain-Wynia and Baker, 2006, Hasnain-Wynia et al., 2004, Regenstein and Sickler, 2006). Training on the importance of data could improve data quality, which has implications for the proper evaluation of services.

5.4.2 Sensitivity

Data on ethnicity is commonly incomplete in healthcare datasets (Iqbal et al., 2012b, Petkovic et al., 2018). Although the spread of ethnicities recorded in the dataset obtained for this study was largely consistent with the census data from the data collection area (Table 5.2), link workers were surprised to find out from post-study reports that 88.5% of their service users were in the 'White English/Welsh/Scottish/Northern Irish/British' ethnic category. They instead thought that there were a higher number of ethnic minorities who utilise the service. Health inequalities disproportionately impact ethnic minorities (Evandrou et al., 2016, Toleikyte and Salway, 2018). It can be assumed that this population are more likely to require a social prescription as ethnic inequalities in health, in part, reflect further inequalities between ethnic groups, such as socioeconomic position, health service

access and use, and racial discrimination (Nazroo, 2003). For example, unemployment rates are generally higher among black and minority ethnic (BME) individuals compared to white British individuals (Department for Work and Pensions, 2014). Also, a greater proportion of BME individuals live in low-income households compared to white British individuals (Evandrou et al., 2016). Consequently, the spread of ethnicities accessing SP would not be expected to align with that of the local population, given the high proportion of individuals in the 'white English/Welsh/Scottish/Northern Irish/British' ethnic category living in this locality (Table 5.2).

Although ethnicity data were relatively well completed (67% of incidences), the actual spread of ethnicities could be different to that reported if this information were recorded for all participants. For example, if it is assumed that the missing 33% of data represents those from BME groups, the percentage of service users from white ethnic groups reduces from 89.3% to 60%, whereas those from non-white ethnic groups increases from 6.5% to 39% (not accounting for those marked as 'not specified' and 'prefer not to say'). The following paragraphs discuss sensitivity surrounding ethnicity data, and how this can lead to poor completeness.

Informal investigation with the link workers revealed that they felt uncomfortable asking questions about ethnicity, so they either guessed based on appearance, or, if this were not possible, they left the cell blank. This raised concerns over the accuracy of the information recorded (Lepa et al., 2013). In fact, several studies have shown a disparity between self-report and administrative ethnicity data (Quan et al., 2006). The missing ethnicity data in this study can be explained through literature looking at traditional healthcare. Investigation with healthcare staff has found that some are reluctant to ask questions about ethnicity (Hasnain-Wynia and Baker, 2006, Hasnain-Wynia et al., 2004). Research reports that this is due to assumptions that questions about ethnicity would make service users feel uncomfortable (Hasnain-Wynia et al., 2010, Jorgensen et al., 2010). This is corroborated by service users, as, in research, some indicated that they felt uncomfortable disclosing their ethnicity in a healthcare setting (Baker et al., 2005, Baker et al., 2007, Hasnain-Wynia et al., 2004, LaForge et al., 2018, Quan et al., 2006). Multiple reasons for this discomfort have been reported including, a fear of discrimination due to ethnicity (Baker et al., 2007, Kandula et al., 2009), the misuse of information (e.g., to determine immigration status) (Baker et al., 2007, Varcoe et al., 2009), and the potential impact on the quality of care received (Lofters et al., 2011). Despite concerns over the collection of ethnicity data, the majority of service users believe that this information should be collected (Baker et al., 2007, Iqbal et al., 2012a), and some research highlights the best practice to collect this (Iqbal et al., 2012b, Petkovic et al., 2018). For example, it is commonly argued that, when collecting sociodemographic information, such as ethnicity, the benefits of collecting these data, how the data will be used, and how the data will be kept secure

and confidential should be communicated clearly to the service user (Iqbal et al., 2012b, Kirst et al., 2013). Whilst sociodemographic information, such as ethnicity, is important in healthcare settings to inform service structure, it is also important to record such information due to the prevalence of certain diseases in minority ethnic groups (Iqbal et al., 2012b). However, this is not known by many service users, and, therefore, some research highlights the potential for an educational programme on this (Kirst et al., 2013).

The discomfort around data collection is not specific to ethnicity, research reports similar issues for wider sociodemographic information such as income, languages spoken, and religion (Petkovic et al., 2018); this is especially pertinent for service users from potentially disadvantaged or vulnerable populations, many of whom would benefit from SP (LaForge et al., 2018, Petkovic et al., 2018). There is no research which examines the collection of sociodemographic information in SP services, however, lessons from healthcare can be applied to support proper collection. For example, if link workers understand and explain to service users why they are collecting ethnicity data, this might alleviate both link workers' and service users' discomfort (Iqbal et al., 2012b, Kirst et al., 2013), support the trust relationship between service user and professional (Petkovic et al., 2018), and, consequently, facilitate proper data collection.

5.4.3 Poor System Design

The only variables which were completed in 100% of cases were those which were automatically generated: action plan ID, presenting issues ID, reference number, and registration record type. These variables were of use to the SP service but not this study, so, if inferential statistics were possible, these would have been removed prior to this. Basic demographic information such as city, local authority, postcode, name of GP and practice, gender, and age (determined from date of birth), were also well completed relative to the rest of the dataset (72.4% - 99.7%). This information was sent to the SP service in the referral from the GP practice, and, therefore, it did not need to be collected by the link workers. This suggests that, if the service were to receive a greater amount of information from the GP practice, or have access to service user records, data quality would be improved. However, it needs to be noted that not all information from the GP practice was well completed; for example, the 'local authority' variable was only completed in 72.4% of instances. Therefore, receiving a greater amount of information from the GP practice would only benefit SP if this were of good quality. Research has identified quality issues with the data held by healthcare services (Jordan et al., 2004, Thiru et al., 2003). It notes that there is a significant issue with the completeness and correctness of the data documented during patient care (Köpcke et al., 2013, Majeed et al., 2008). Therefore, data quality is not only an issue in SP, but also in wider healthcare (Dhindsa et al., 2018).

To input information in the data management system used by link workers, drop down menus containing a selection of options were used rather than free text boxes. Whilst this standardised the information input, it restricted the information which could be recorded, and, in some instances, it was not possible for cells to be completed as the data management system lacked suitable input options. For example, in the 'caring responsibilities' variable; there was no input option for those who both 'have a carer' and 'are a carer'. This is an issue considering that the elderly population which were accessing the SP service (Figure 5.1) may provide care for a friend or family member, but they also might require care themselves. Furthermore, the 'disability' and 'learning disability' variables were poorly completed (38.4% and 3.6%), and this is perhaps explained by the lack of a 'no disability' input option. It is probable that some of the incomplete cells represent those who had no disability. Yet, due to the poor completeness of data set as a whole, it could not be assumed that all blank cells represented a negative response.

The fact that cells could be left blank is a weakness of the system design. Given the importance of understanding the service user population to ensure appropriate groups are targeted, and to tailor services (Coupe et al., 2018), it is imperative that demographic data are collected. However, without making such variables mandatory the perceived importance of them is undermined. If those completing the data do not perceive it to be of importance, then they are less likely to collect it. Finally, when examining data quality, the AHIMA Data Quality Management Task Force (1998) stressed the importance of clear definitions and acceptable input value so that current, and future data users know what the data mean. The variables of particular interest were the 11 measures of social, environment, economic, and wellbeing outcomes; however, these were completed in just 18.18% of instances. It was presumed that the poor completeness of this variable is due to the unclear input options provided in the data management system.

5.4.4 Practical Issues with Data Collection

Improvements in the design of the data management system would not improve the quality of the data without action to support the proper collection of data. Upon the poor data quality being realised, an informal inquiry into the methods of data collection was carried out. It became apparent that link workers were not inputting the data directly into the system during the initial meeting with the service user due to a lack of portable electronic devices. Instead, they were making notes on paper and then inputting the data onto the system later; in some instances, this was several weeks later. The notes that link workers were making were not on a paper version of the online form, but instead were on plain paper, or within a notebook. Paper is not an uncommon method of data collection, in fact, paper is used for data collection and management in the majority of SP services

(Bell, 2020) and within some healthcare services (AHRQ, 2018, Dickinson et al., 2019, Sarkies et al., 2015). However, this method of data collection raised several concerns. Firstly, due to a lack of access to the data collection form during the initial service user meeting, link workers may have forgotten to collect some information, therefore providing some explanation for the blank cells. Informal investigation revealed that, on occasions, link workers would add missing information from memory if they had failed to collect it during meetings with service users. However, this method may have resulted in the recording of inaccurate information, and not all variables can be determined without gaining the information from the service user (e.g., education and employment).

Secondly, human error could occur between data collection and input (Dickinson et al., 2019, Sarkies et al., 2015); incorrect information could have been accidentally typed into the system. For example, in the age variable of the dataset obtained, there were three participants who were recorded to be below 18, including one who recorded as zero, and, as the service does not support those under 18, this was assumed to be human error at the input stage. Moreover, the time delay between data collection and input was of concern. In some cases, link workers were only inputting data onto the electronic data management system once a month. Consequently, a service user's information could have been missing from the system for four weeks after their initial meeting. This could lead to several potential issues, for example, if a link worker had to take some time off work, participants not yet on the electronic system would not be followed up by the service. Also, the time delay meant that the electronic system did not accurately reflect all participants who were being supported by the service. The time delay between collection and input was cited by link workers to be due to the time required to input the data onto the electronic system. They argued that they spent most of their working week away from their offices meeting service users, and, therefore, they did not have time to input the data; they believed that their time was better used supporting service users, rather than inputting data. A lack of time for data entry has also been cited as a barrier to data collection within healthcare services (Bach-Mortensen et al., 2018, Bach-Mortensen and Montgomery, 2018, Thriemer et al., 2012).

Finally, collecting patient data on paper raised ethical concerns. During the informal investigation, link workers reported that they typically collected data from multiple service users before inputting this onto the electronic data management system. The notes containing the service user information were kept in the link workers' bags or cars and destroyed once the data had been input. The data that were collected from service users contained personally identifiable information (e.g., name, address, and age) which is protected under the Data Protection Act (Department for Digital Culture Media & Sport, 2018, Great Britain, 1998), and, more recently the General Data Protection Regulation (GDPR) (European Parliament and Council of European Union, 2016). These documents

offer guidelines for the handling of personal data, including how data should be collected and stored. Of particular importance to how service user data were being collected and stored is the principle that data should be kept secure (Department for Digital Culture Media & Sport, 2018). The notes taken by link workers were transported between their homes, the homes of service users, and their place of work in their bags and cars; the loss, theft, or damage of the data could have occurred at any point. The notes made not only contained identifiable information, but they also identified potentially vulnerable people (e.g., the elderly or those with a disability), therefore putting them at risk of crime. The unsafe storage methods used by link workers would have been considered a data protection breach, however, link workers were unaware of this. This highlights the need for data protection training for link workers and SP services, and for increased funding to provide portable electronic devices to remove the use of paper records.

5.5 Findings

It was not possible to address the research question due the poor quality of the data obtained. Instead, the findings from this study were unexpected. Whilst it was possible to gain a limited understanding of the service user population in this service, this was not a novel finding (Carnes et al., 2017, Dayson et al., 2016, Dayson and Bennett, 2016a, Dayson and Leather, 2018, Healthy Dialogues, 2018, Kimberlee, 2016, Liles and Darnton, 2017). Instead, the main finding from this study is the poor quality of data held by the SP service. Existing research has noted the poor quality of specifically service evaluation data (Bickerdike et al., 2017, Kimberlee, 2015a). However, this study highlighted the poor quality of SP service data as a whole.

The findings from this study informed research objective 6: to identify factors which hinder the implementation of SP services. Good quality data are required before this evidence base can be developed, and, therefore, effective data collection and management must be implemented. Many SP organisations do not have a data management system, instead relying on paper records, therefore making the analysis of data challenging (Bell, 2020). Some organisations have developed digital platforms for SP which provide an electronic program for the efficient collection, storage, and retrieval of service user data (Elemental, 2018, PSIAMS, 2018, ROVA Wellness, 2018). If such tools were used consistently across GP practices, SP services, and VCSE organisations, it would support improved data collection, quality, and information sharing. However, to ensure continuity, one platform needs to be used across all sectors, and substantial funding for the purchase of equipment and the training of staff is needed. Furthermore, poor data collection and quality has implications for patient safety (NHS England, 2020a).

The reasons for the poor-quality data were informally investigated with the link workers who completed the data and the service manager. This led to a discussion of the potential reasons for poor data collection, however deeper investigation into how data are collected and stored in SP services is required. Consequently, study I informed study II as interview schedules were edited to include investigation into data collection, storage, and analysis. Whilst study II ran concurrently to study I, additions to the interview transcripts were made after the collection of the first data set and the issues with data quality were realised.

5.6 Chapter Summary

This chapter has presented the findings of study I. Due to the poor-quality of the data obtained, the research aim was not addressed. A data driven approach was adopted to describe the service user population using any data completed in greater than 95% of instances. However, this did not provide any novel insight into SP. Instead, the main finding from this study was the poor quality of the data held, and the informal information gained from the link workers who completed it. This finding informed the interview transcripts used in study II to enable deeper investigation into the potential reasons for poor data quality.

Chapter 6: Study II Findings

6.1 Introduction

Whilst the findings from study I were not as anticipated, they did highlight issues with data collection and management which were explored further during data collection for study II. This study aimed to gather in-depth qualitative data to understand key stakeholders' perspectives of SP. In this chapter, first the data collected, including information on participants in each stakeholder group, is presented. Following this, the key findings from the thematic analysis are presented and discussed. Although the data from each stakeholder group was analysed separately, the themes which emerged were similar across the groups; for this reason, the findings from each group were combined and then compared. Finally, the non-thematic aspects of the data are considered.

6.2 Participants

In total, 51 participants took part in study II. The following sections provide detail on the participants in each stakeholder groups. Participants were from varied areas across England, with the highest concentration in the Midlands due to the geographical location of the researcher.

6.2.1 *General Practitioners*

In total, 18 GPs from 16 general practices took part in individual face-to-face interviews, the length of which varied between 19 and 50 minutes. Interviews were anticipated to last up to an hour, however, due to the high workload of GPs, although all interview schedule questions were covered, some interviews were not as detailed as expected and were, therefore, shorter in length. Nevertheless, recruitment continued until data saturation was reached, and, therefore, the shorter interviews were not a concern. Table 6.1 displays the gender and location of GPs interviewed.

<i>Code</i>	<i>Gender</i>	<i>Location</i>
001	Female	Merseyside
005	Female	Warwickshire
006	Male	West Midlands
007	Male	West Midlands
008	Female	West Midlands
011	Male	Worcestershire
012	Female	West Midlands
013	Female	West Midlands
015	Male	West Midlands
016	Female	Staffordshire
017	Female	Staffordshire
018	Male	Staffordshire
019	Female	Warwickshire
020	Female	Warwickshire
021	Male	Staffordshire
029	Male	West Midlands
034	Male	Staffordshire
035	Female	Merseyside

Table 6.1: The demographics of participating GPs (n= 18)

6.2.2 *Link Workers*

Fifteen link workers from seven SP organisations took part in study II. Data were collected during six face-to-face group interviews which lasted between 47 and 86 minutes. The number of participants in each interview was dependent on the availability of link workers in the service. Five group interviews contained participants from the same service, and one contained two people from different services due to both services only having one member of staff. Table 6.2 displays the group which interview group each link worker was in, their gender, and their location.

<i>Code</i>	<i>Group interview</i>	<i>Gender</i>	<i>Location</i>
002	1	Male	West Midlands
003	1	Female	West Midlands
004	1	Male	West Midlands
009	2	Male	Staffordshire
010	2	Female	Staffordshire
023	3	Female	Berkshire
024	3	Female	Berkshire
025	3	Female	Berkshire
027	4	Male	West Midlands
028	4	Female	West Midlands
031	5	Female	Derbyshire
032	5	Female	Derbyshire
033	5	Female	Derbyshire
042	6	Female	Warwickshire
043	6	Female	Warwickshire

Table 6.2: The demographics of participating link workers (n= 15)

6.2.3 *Service Users*

Eighteen service users took part in study II. Service users were offered different modes of interview to suit their needs. In total four face-to-face interviews, six telephone interviews, and three group interviews (one group of four, and two groups of two participants) were conducted. Interviews with a single participant (telephone and face-to-face) lasted between seven and 38 minutes and group interviews lasted between 11 and 15 minutes. In some instances, participants were wary of the recording device, and were more open to discussion when it was not turned on. This has resulted in some of the interviews being short despite the researcher spending longer in discussion with the participant. Nevertheless, recruitment continued until data saturation was reached, and, therefore, the shorter interviews were not a concern. Table 6.3 displays the gender, location, and reasons for referral for each service user.

<i>Code</i>	<i>Gender</i>	<i>Location</i>	<i>Reason for Referral</i>	<i>Referral received</i>
014	Female	West Midlands	Isolation, physical inactivity	Local gym, reading group, social walking group
026	Female	West Midlands	Isolation, transport	Coffee morning with free transport service
030	Female	West Midlands	Care plan guidance, legal support	Age Concern, Citizens Advice Bureau
036	Male	Merseyside	Isolation, Parkinson's, physical inactivity	Police treatment centre, social walking group
037	Male	West Midlands	Depression, isolation	Men's club
038	Male	West Midlands	Condition-specific support, isolation	Breathe Easy
039	Female	West Midlands	Condition-specific support, isolation, transport	Breathe Easy, free transport service
040	Female	West Midlands	Condition-specific support, isolation, risk of fall in home	Breathe Easy, local council
041	Male	West Midlands	Condition-specific support, isolation	Breathe Easy
044	Male	Warwickshire	Alcohol dependency, depression, finance issues	Christians Against Poverty, P3 (debt support), addiction treatment
045	Female	Warwickshire	Anxiety, depression, isolation	Buddy service, free transport service, art classes
046	Male	Warwickshire	Care plan guidance, risk of fall in home	Age UK, local council
047	Female	Staffordshire	Isolation, illness-specific support	Support group including social activities
048	Female	Staffordshire	Illness-specific support, stress	Mindfulness, support group
049	Female	Staffordshire	Isolation, stress	Carer support group
050	Male	Staffordshire	Illness-specific support, isolation	Peer mentoring, support group including social activities
051	Female	Staffordshire	Illness-specific support, physical inactivity	Pulmonary rehabilitation centre, social walking group
052	Male	Staffordshire	Illness-specific support, isolation	British Lung Foundation, support group including social activities

Table 6.3: The demographics of participating service users (n= 18)

6.3 Themes Identified

Nine overarching themes, most of which also had sub-themes, were identified from the interview transcripts of all stakeholder groups. The themes identified, and their sub-themes where applicable, are presented in Table 6.4 and

Figure 6.1. As commonalities were found between the stakeholder groups, the findings from all groups were combined and presented together. This enabled better comparison between the groups and reduced potential repetition if the groups were to be presented separately. Furthermore, this study collected multiple stakeholder perspectives to gain a rounded understanding of SP in practice, and, therefore, combining the viewpoints better provides this understanding. Not all themes identified were present in all stakeholder groups. Consequently, Table 6.4 notes which stakeholder groups each theme was present in. Also, to further clarify this,

Figure 6.1 presents a colour coded thematic map which denotes which themes were identified in each stakeholder group. Themes are presented in ovals and sub-themes are presented in rectangles. The relevant sections of this thematic map are presented under the related theme headings below to further illustrate the relationship between themes and sub-themes, and which themes were identified in each stakeholder group.

This study aimed to address multiple research objectives (objectives 2-6). To highlight the link between the findings and the research objectives, Table 6.4 denotes the research questions associated with each theme identified. Whilst an inductive approach to thematic analysis (Braun and Clarke, 2006, Braun et al., 2016) was adopted to maintain the participants' voices and ensure the findings were grounded in the participant data, it became apparent during analysis that themes identified related to the RMIC (presented in section 2.7.2) (Valentijn, 2016). Subsequent deductive mapping of themes and subthemes onto the domains of the RMIC further interrogated the data and provided a deeper insight into SP as an example of integrated care. The themes and related domains are presented in Table 6.4. In the following sections, the themes identified are presented under the relevant domains of the RMIC. The relationship between the domain and the themes is briefly discussed before the theme, and sub-themes if applicable, are presented.

<i>Theme</i>	<i>Sub-themes</i>	<i>Participant group</i>	<i>Associated research question</i>	<i>Domain of the Revised RMIC</i>
Treating the whole person	The provision of personalised care	GP, LW, SU	2	Targeted individuals and clinical integration
	The provision of holistic care	GP, LW, SU	2	
Service user reluctance	None	GP, LW	6	
Empowerment for health promotion	Prevention of future ill health	LW	2	Population based care
	Increased control over own health	GP, LW, SU	2	
Interdependence with primary care	GPs as gatekeepers	GP, LW, SU	3, 6	Professional and organisational integration
	The dominance of the medical model	GP, LW	3, 6	
	Medicalisation of SP	GP	3, 5, 6	
	Reliance on GP perception	GP, LW	3, 6	
The versatility of the link worker role	Supported access	LW, SU	4	
	Link workers as prescribers	LW, SU	4	
	Coordination of support	SU	4	
	Valued ongoing support	SU	4	
Resource limitations	The need for financial support	GP, LW, SU	6	System integration
	Time pressures	GP, LW	3, 4, 6	
Data management to support work and evaluation	The importance of data management tools	LW	6	Functional integration
	Challenges with accessibility	GP	6	
	Limited evidence availability	GP, LW	6	
Discrepancies in knowledge and understanding	Limited awareness of SP	GP, LW, SU	6	Normative integration
	Defining SP	GP, LW	5	
	Inconsistent language	GP, LW, SU	5, 6	
Mismatch of expectations	Pressure from funders	LW	6	
	Inappropriate referrals	LW	3, 6	
	Variations in service user expectations	LW	6	

Key: General practitioner (GP), Link worker (LW), and service user (SU)

Table 6.4: The themes, sub-themes, participant group in which they were present, associated research questions, and related domain of the revised RMIC

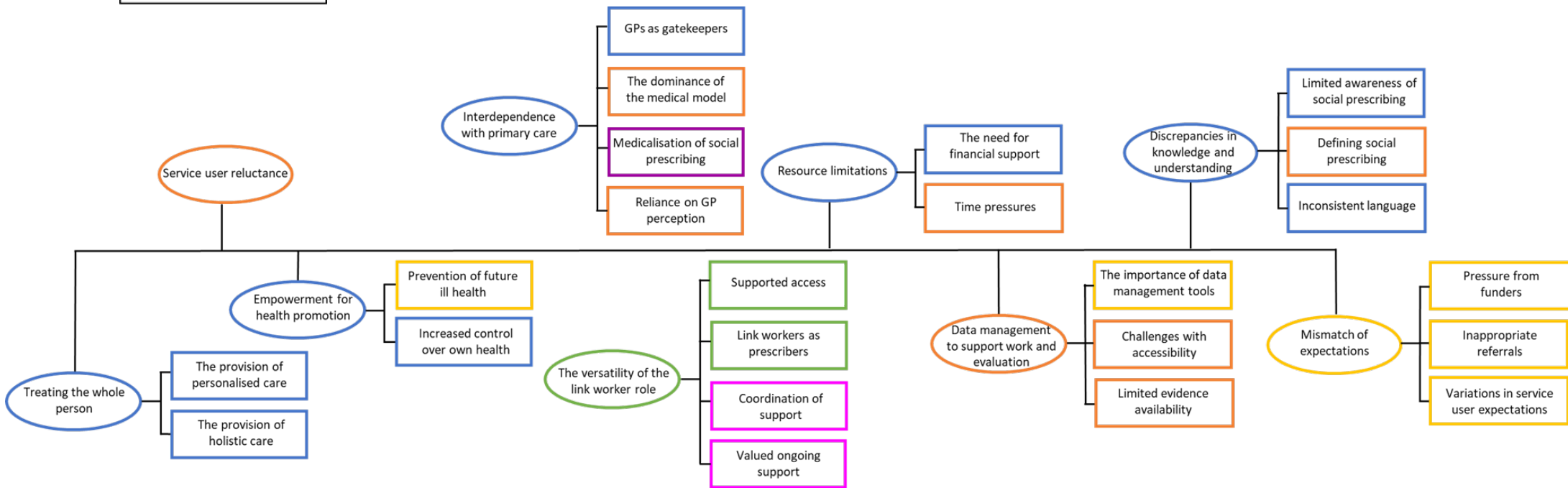


Figure 6.1: Thematic map of the themes identified and key.

6.4 Person Focussed Care and Clinical Integration

Person focussed care is also known as patient-centred care (Valentijn et al., 2013). Similar to Dahlgren and Whitehead (1991), this element of the RMIC addresses the gap between medical and social issues as it acknowledges that disease is simultaneously a medical, psychological, and social challenge (McWhinney, 1997, Valentijn et al., 2013). It contends that care should be based on an individual's personal preferences, needs, and values. Similarly, clinical integration calls for a person-focused approach to improve an individual's overall health and wellbeing, rather than focussing on a single element (Valentijn et al., 2013). This aligns with the themes 'treating the whole person' and 'service user reluctance'.

6.4.1 Treating the Whole Person

The theme 'treating the whole person' denotes the fact that social prescriptions are designed specifically for each individual service user based upon their needs. During the development of the social prescription, a wide range of factors are considered. This theme has two sub-themes: 'the provision of personalised care' and 'the provision of holistic care'. The relationship between these and the theme is presented in Figure 6.2. This theme, and its sub-themes were present in all stakeholder groups.

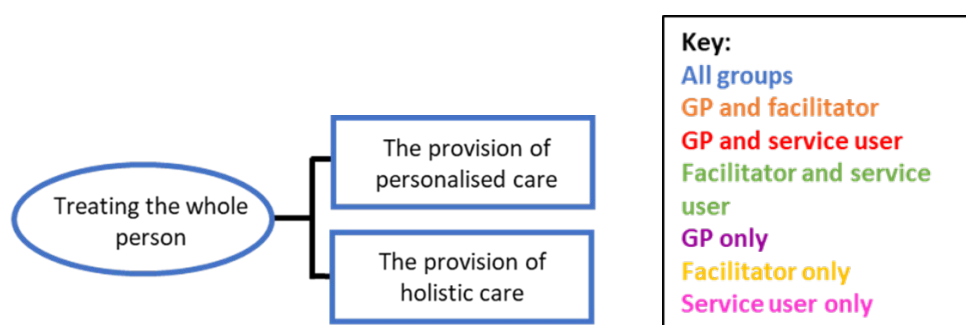


Figure 6.2: The theme 'treating the whole person' and its sub-themes.

6.4.1.1 The Provision of Personalised Care

Social prescriptions are designed to address the needs of each individual service user. It is not a one-size-fits-all approach. There were numerous examples of personalised working within the link worker group. Link workers considered it to be their job to tailor services to the needs of the service user. One link worker summarised the importance of personalised care:

I don't think that people are just one entity and fit into a nice little box. Actually, people are human beings with a whole variety of issues, and SP is about addressing that individual person. It's about looking at Joe Bloggs and what's perfect for Joe Bloggs,

rather than, okay, they've come with these three conditions and this is the best for them.

(LW_042)

The importance of personalised care was often referred to by GPs in the context of typical healthcare. For example, one GP noted that:

It has to be tailored to them (the service user) and the situation they're in. It's not really helpful just to tell them what the government's guidance on exercise or activity levels is and be gone with it, because that's just very easily ignored. (GP_029).

A GP furthered this point by noting that social prescriptions are not conducted in the same way as medical referrals due to the personalised nature of them:

It's not a one size fits all system, which actually sometimes, you know, with medical referrals, sometimes it is a bit one-size fits all, it's like, you know, you refer to the hospital, they send the appointments out, you go to the outpatient clinic and it's all very rigid, whereas with SP, it's anything but. (GP_012)

Service users referred to the personalised nature of SP indirectly by speaking about the care they had received. One service user noted that a link worker had asked them “*what would you like?*” (SU_026), and they were able to work with the link worker to develop a plan which would address this need. Another service user compared the support they had received from a link worker to earlier support received from a service:

(If you) just need advice on a care home or, try that one or we've got a list you can go down. It was the same when they (previous support) were finding a helper for me to give him his (husband) wash in the morning. They get a list, and then they say, you can have that one. It doesn't matter whether they're any good or not. (SU_030)

The support the service user had received previously was not personalised, often meaning that advice given was inappropriate and, therefore, resulting in repeated visits. Since the introduction of SP, personalised support has been given in this instance, resolving their issue.

6.4.1.2 The Provision of Holistic Care

Both link workers and GPs spoke broadly about their role in “*treating the whole person rather than just the medical condition*” (LW_042), and the importance of “*social and medical, clinical, working together*” (LW_042). The theme ‘the provision of holistic care’ refers to the treatment of the whole person, considering psychological and social factors rather than solely the symptoms of illness. This aligns with the varied social, economic, and environmental factors which impact individual health. It

was argued that, to prevent ill health, a preventative approach, which considers the wider determinants of health, was needed in healthcare.

GPs commonly mentioned the importance of considering social issues in their work, *“I think it is just a really important thing for patient’s wellbeing and their, you know, looking at a patient as a whole, all of these social issues are really important”* (GP_035). Link workers also referred to the importance of treating these social issues, one common example given was treating the root cause of symptoms with SP:

You don't just refer usually to one social...and, oh, everything's been solved. It's that holistic way of working, I'm in debt, I'm stressed out with debt, I've got stress and anxiety, that's led to mental health issues. (LW_002)

Similar to the ‘provision of personalised care’ theme, service users referred to the holistic nature of SP in a more indirect way. They frequently mentioned how they were able to get support with numerous issues: *“I went down to see (link worker) at (SP organisation), told her all my problems which is stress, depression, and alcohol dependency”* (SU_044). They also frequently stated that they received multiple social intervention referrals to address different issues, suggesting that the link worker had treated them holistically. For example, one service user mentioned they had received three referrals to address the various effects of long-term illness: *“So, (link worker) told us about groups that could help, like the exercise group, the rehabilitation, and also this group (a social group).”* (SU_051)

During interviews, the wider determinants of health were considered by each group. Some GPs mentioned Dahlgren and Whitehead’s (1991) model of the SDH:

Dahlgren and Whitehead diagram which shows the individual at the centre, surrounded by individual lifestyle factors, surrounded by social and community networks, surrounded by food education, work environment, living and working conditions, unemployment, water and sanitation, healthcare services and housing and then surrounded by general socio-economic, cultural, and environmental conditions. (GP_018)

This understanding of the importance of social options in primary care could be a product of the GPs’ education as the responses were consistent across the stakeholder group. Also, the reliance on pre-determined models, as opposed to personal experience, is reminiscent of an education setting.

In contrast to GPs, service users tended to express ideas that were personal to them when considering the importance of SP, many of which reflected the wider determinants of health model

at the ‘social and community networks’ level; it was typical for service users not to consider the broader issues surrounding health. Many service users mentioned that SP addresses isolation and increases social interaction. One service user noted that, without social intervention, “a lot of people wouldn’t speak to nobody from one week to the next”. (SU_041). Other service users unconsciously addressed the ‘individual lifestyle factors’ level of the model by citing SP’s impact on potentially damaging aspects of their lifestyle. For example, one service user referred to his “alcohol dependency problem” when describing why he believes he was going through “an extended period of depression or stress” (SU_044).

Link workers tended to combine both the viewpoints of service users and GPs. Many referred to the wider determinants of health, but also cited individual factors that impact the service user:

So frequently for me, social intervention is maybe dealing with the determinants of health and wellbeing. And that can be multiple, again, and it can be across a whole range of areas that are economic, financial, social, emotional, et cetera. (LW_010)

6.4.2 Service User Reluctance

Both GPs and link workers referred to certain service user’s reluctance to engage when considering the barriers to SP. This reluctance was thought to come from a preference for pharmaceutical options, apprehension about the referral, and a lack of education on, or awareness of the benefit of non-pharmaceutical options. This theme was not separated into sub-themes, as displayed in figure 6.3.

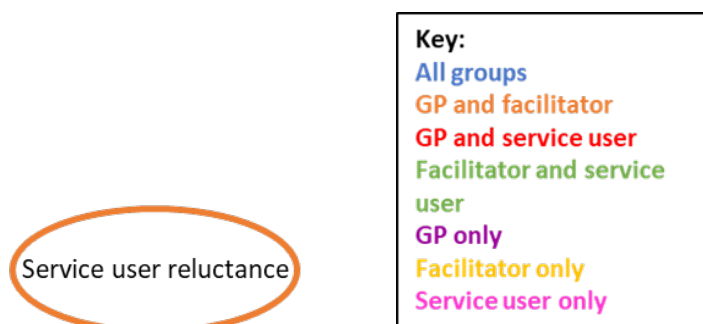


Figure 6.3: The theme ‘service user reluctance’.

Both GPs and link workers noted that some service users were unwilling to engage in SP: “we do get patients who have either just placated their GP or nurse or referrer and just said, yes, yes, and once we get involved, they’re, like, actually, no, I don’t want your service” (LW_042). This was for a variety of reasons. One of the key reasons given by numerous GPs was service user’s lack of motivation to improve their own health:

Sometimes I think patients feel a bit fobbed off, that they want us to do more, and so why are we sending them away with work to do? And some patients are almost sort of...I hesitate to say angry but are quite resistant to the idea that they should have to do things to improve their health. I think resistant is...would be my, yeah, choice of word there. (GP_013)

Another key reason suggested for the reluctance of some service users to engage was that they preferred pharmaceutical options:

I think for some people, some patients do just want a pill to fix all their problems and if you're going to suggest anything that's not a tablet...and some people just object, they really don't want to put an effort in to improving their health. (GP_005)

GPs and link workers also stated that some service users were hesitant about SP. Both stakeholder groups argued that this nervousness was mostly due to the service user being vulnerable. For example, being mentally unwell, elderly, or reluctant to seek help. One link worker offered an example of this:

...for the older generations, they're reluctant to show that they're...especially loneliness and, again, a bit of a generalisation, but especially with men, they're quite reluctant to admit that they're lonely, they won't say it in those words, and they might not...I'm assuming they won't tell their doctor that either sometimes. (LW_027)

GPs supported this idea, and detailed one of the difficulties they often experienced when trying to prescribe social options:

...especially with older people or depressed people. Like I say, somebody's had a bereavement and they're on their own now, and I think they're often worried about doing something that's new and different and they're often worried about meeting new people when they might not feel comfortable or even ready yet, to start socialising. Sometimes, although people are very lonely and unhappy being in their own home all the time, and isolated, they don't necessarily always want to go out and do something about it. (GP_005)

This vulnerability experienced by those suffering from mental health issues was thought to be a key contributor to the lack of uptake of social prescriptions: “...if you've already got somebody who is fairly vulnerable, perhaps low confidence and if all you do is signpost them or give them the information very often, they won't actually pick that phone up and make that phone call.” (LW_031)

A GP supported this idea by explaining the issues service users experience:

...they almost slip into a sort of first day at school nerves mentality, where the idea of talking to a complete stranger or meeting someone new, it becomes so frightening in and of itself that they choose not to engage with it, which of course continues to perpetuate that problem. (GP_011)

Finally, GPs believed service user's education on the topic of SP and the benefits of non-pharmaceutical options impacted the success of SP:

...you don't hear much about it in the press or the media or anything. I don't think I've ever seen it written about particularly under that blanket in the press, so it could just be a lack of education. (GP_016)

This lack of awareness means that service users do not generally seek out this sort of treatment on their own and can be surprised when it is mentioned by their GP.

6.5 Population Based Care

Population based care (universal population and targeted sub-groups) addresses health-related needs within a defined population to promote health and wellbeing, and to reduce the risk of health problems (Valentijn et al., 2013). Within the interviews it was evident that stakeholders considered SP to be important in health promotion and the prevention of ill health, including empowering individuals to take control of their own health.

6.5.1 Empowerment for Health Promotion

The theme 'empowerment for health promotion' was woven throughout the transcripts of all three groups. It was defined as enabling people increased control over their own health and lives in a broader sense, promoting health and aiming to reduce the paternalistic relationship between doctor and patient. The theme has two sub themes: 'prevention of future ill health' and 'increased control over own health'. The first sub-theme was only found in the link worker group, whereas the second sub-theme was present in all stakeholder groups, as presented in figure 6.4.

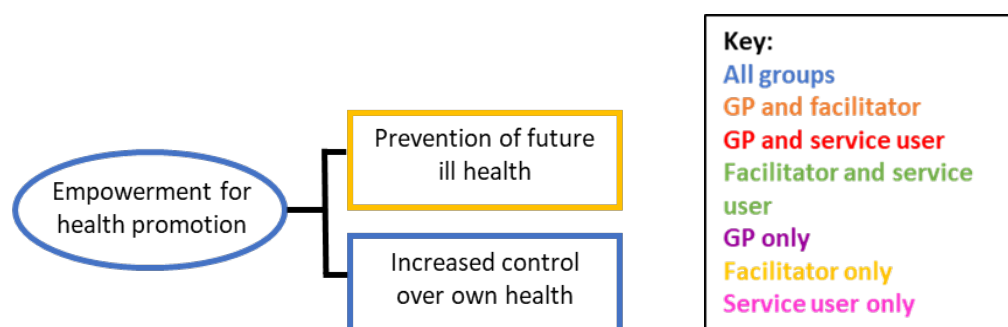


Figure 6.4: The theme 'empowerment for health promotion' and its sub-themes.

6.5.1.1 Prevention of Future Ill Health

The sub-theme 'prevention of future ill health' was only present in the link worker group. It was defined as: systems that reduce the likelihood of service users requiring support in the future. Link workers spoke broadly about systems that can be put in place to reduce the likelihood of events occurring, believing that it was more effective to prevent things from happening than to fix them once they did. One such example is offering an elderly person a home assessment to see whether they require safety rails. If these are put in place when necessary, they could prevent a fall which would result in a hospital admission and potential further issues. One link worker noted that prevention can often be *"more time and labour intensive and costs more"* (LW_033). However, they explained that they believe it to be a more effective form of care. Some link workers remarked that they *"have had people who have said you stopped me from committing suicide"* (LW_043), thus preventing *"another hospital admission for suicidal attempts"* (LW_042), therefore reducing

healthcare costs. Link workers noted that the aim of SP was often to *“to reduce the burden on the healthcare, whether that’s A&E, whether that’s GP admittance”* (LW_027), and this could be achieved through prevention. Many link workers referred to the pressure they were under to meet targets set by funders to reduce primary care attendances *“to deal with those patients who are overly reliant on primary care”* (LW_009), however, link workers considered the issues with evidencing this:

I think it’s really difficult to prove a negative as well. I mean, it’s how do you prove that by helping somebody to access a lunch club or access befriending or access whatever it is, that’s stopped them going to the GP because we’re not on an even playing field with information sharing either. (LW_003)

6.5.1.2 Increased Control Over Own Health

Both link workers and GPs considered how SP supports service users to take control of their own health. One GP noted that patients are *“owners of their own health”* (GP_005). This suggests that GPs believe that patients should be encouraged to develop self-management strategies. GPs suggested that SP encourages service users to consider non-medical options to address issues which are not necessarily medical:

I think it’s great for the patients that they’ve got that option and it’s showing them that health isn’t just all about medicalising everything, and that actually you need to take control of your own health by exercising, eating healthily and doing those sorts of things. (GP_035)

Link workers shared GPs’ perspective on this. One stated that service users must play *“an active part in getting involved in those things that will probably make them feel better”* (LW_002) otherwise they did not think a social prescription would be successful. The service user interviews revealed examples of this empowerment through personal experiences. One service user remarked: *“I used to go to the gym, and I felt as though I was doing something purposeful and it made me feel better. So, you feel like you’ve achieved something and you felt better for it”* (SU_036).

Peer support was found to be important for service users to manage their own health. ‘Peer support’ refers to people offering emotional, social, or practical advice to their peers. It can refer to initiatives such as condition-specific groups where people meet in person, or online, as equals to offer each other support on a reciprocal basis. Service users spoke widely about the support they receive from people they meet during social interventions, such as Breathe Easy for chronic obstructive pulmonary disease (COPD). Multiple service users mentioned the usefulness of meeting others with the same condition to share their experiences with someone who can understand. They also noted

that meeting people whose illness was more progressed than theirs helped them plan their own future. One service user, when considering the peer support opportunities of such groups, noted: “I think it helps everyone there you know because there's people worse than myself and people what seem better than myself, and so there's a good mix” (SU_036).

Some service users also discussed the educational benefits associated with attending social intervention groups and how this supported them to manage their care. One service user noted:

We have a different speaker each month, and some bring paperwork that we can read. And we learn things that we didn't know. Things that will help us, as individuals, you know, especially when they specialise in certain things. And it really is a big help.
(SU_047)

One service user noted that they were struggling to ascertain how to get their oxygen equipment abroad, so, the link worker arranged for an expert to give them advice thereby ensuring the service user could travel independently and safely:

Yes, they had the oxygen providers, they came out and they gave us a discussion on what was available and what you should do if you're going to go on holiday, rather than taking the equipment with you, you need to order the equipment through the company, and it will be delivered to where you're going. What happens if you're going abroad, what you should do then. So, yes, it's been very informative. (SU_048)

6.6 Professional and Organisational Integration

Professional integration refers to partnership working within (intra) and between (inter) organisations. Organisational integration denotes the extent that services are produced and delivered in a linked-up fashion (Valentijn et al., 2013). It relies upon the sharing of role, competencies, and responsibilities between different services (Fares et al., 2019). Due to the relationship between primary care and SP services, both link workers and healthcare professionals must work together. This relationship, and the impact this has on SP in practice was apparent and is presented in the theme ‘interdependence with primary care’. The RMIC also contends that, to achieve professional integration there needs to be a shared understanding of competences, roles, responsibilities, and accountability (Valentijn et al., 2013). There are variations in the link worker role. During interviews the versatility and different facets of the role become apparent; this is discussed further in the theme ‘the versatility of the link worker role’.

6.6.1 Interdependence with Primary Care

SP organisations are dependent on referrals from healthcare professionals, with many working in partnerships with medical practices. In turn, healthcare professionals depend on the presence of SP organisations to refer patients towards. The theme ‘interdependence with primary care’ was present in all stakeholder groups, however, it was further separated into four sub-themes each of which were found in different groups: ‘GPs as gatekeepers’ (all stakeholder groups), ‘the dominance of the medical model’ (GP and link worker groups), ‘medicalisation of SP’ (GP group), and ‘reliance on GP perception’ (GP and link worker groups). The sub-themes are also presented in figure 6.5.

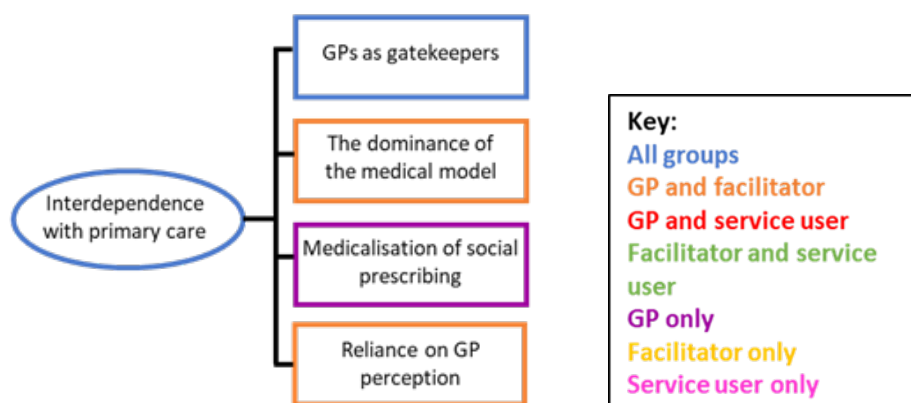


Figure 6.5: The theme ‘interdependence with primary care’ and its sub-themes.

6.6.1.1 GPs as Gatekeepers

The GP is often the first port of call for accessing healthcare and is a ‘gatekeeper’ to specialist services. This is also the case for most SP services. This sub-theme was present in all stakeholder

groups. Service users only referred to the connection between SP and GPs when discussing how they were referred to the service. One service user explained:

I had been going through an extended period of depression or stress which was not helped by the fact that I have an alcoholic...alcohol dependency problem and my doctor had...she had put me on the maximum medication for stress that she could. She said, I can keep...I can put you on tablets for the rest of your life but it's not going to do a lot of good, you've got to do something else, and then she suggested this (Name of organisation removed). (SU_044)

In this example, the GP used SP in conjunction with a pharmaceutical intervention to address the root cause of the patient's symptoms. Alternatively, many patients said that they were "given a leaflet from the doctor" (SU_045) and then directed to contact the service.

GPs and link workers gave differing accounts of the use of GPs as gatekeepers for SP services. Link workers spoke about the benefits to themselves, such as the increased trustworthiness of the service due to its link with primary care:

I think one of the things about supporting, and I think why this service works so well, is that it is very heavily connected to the GPs. So, I think people trust their GPs, so if a GP says there's a service here that we work very closely with, we think you would really benefit from this, they'll trust that GP then to access this service. Whereas if it was separate, it just wouldn't be...you wouldn't have that trust... (LW_002)

Another link worker mentioned how they used this connection to their advantage when contacting service users:

In the first couple of sentences of contacting them, it's I'm from this service that works with X GP surgery, Doctor so and so has asked me to contact you. So that instantly gives you some kudos, I suppose. (GP_003)

In general, link workers were positive about their link with general practice, stating, "the fact that it continues our link with the GP surgeries is good" (LW_023), especially when considering the need for joined-up healthcare. However, GPs were much more hesitant about their gatekeeper role with many referring to their lack of knowledge about the non-medical referral process being an issue:

When I refer somebody to someone, I generally know what happens, so if I refer someone to an ophthalmologist because they've got an eye problem, I can generally explain what's going to happen. With a lot of these aspects, I'm not really quite sure

what's going to happen to them, so they ask me what's going to happen, and I say, I'm not quite sure, go try it, people say it's really good, go and try (GP_021)

Other GPs considered whether acting as a gatekeeper should be their role. This was often owing to issues surrounding appointment availability: *"You know, the idea that it needs me as a gate keeper to that is ludicrous"* (GP_001). Also:

I would even like the patient to be able to go direct to them, so why do they need to come and see me first? If actually they know their issues about lifestyle and weight and whatever else, then go straight there. (GP_001)

6.6.1.2 *The Dominance of the Medical Model*

In primary healthcare, the medical model is dominant. GPs' primary focus is treating clinical conditions, and service users typically expect for their issues to be treated clinically. This sub-theme was present in both the GP and link worker groups and both considered this focus to be a barrier to SP. A GP stated that *"the system is focussed on the medical side at the moment, not on the whole person"* (GP_001). One link worker explained why this might be the case: *"So usually we get a referral from a GP who is quite medically based, and they have less and less time to do some of the more social things"* (LW_027). The time pressures which GPs face tends to mean that clinical issues are prioritised. This is also a GP's speciality, rather than social issues. A 10-minute consultation time does not always allow for wider issues to be discussed. Another GP argued that, due to their predisposition to medicalise issues, they are not the people who should be prescribing: *"we, the GPs, because of the time constraint aren't the best people to do it (prescribe socially), because we over-medicalise everything"* (GP_021). Due to the referral to a SP service typically coming from a healthcare professional, and the service user's expectation to be treated clinically when using healthcare services, link workers noted that often they had to confirm with service users that SP was not a clinical service, and that their issue was social not clinical:

...they've (service user) been to see the doctor, the doctor has spoken...you know, they've been to the medical practice. So, it's all very medical. So, all of a sudden, it's almost like you've got to step aside from that and say it is actually different what we're talking about now, it's not medical. (LW_003)

6.6.1.3 *Medicalisation of Social Prescribing*

This theme was only present in the GP group. Many GPs mentioned that the use of the term 'prescribing', along with the use of GPs as gatekeepers, medicalises potentially non-medical concerns:

I am concerned about the fact that we call it SP, and that it's accessed or signposted through health professionals. Because that's us medicalising or bringing into the medical model things that are social. (GP_011)

The idea that service users need to attend their GP to be referred to a SP service or for the GP to create a social prescription, was considered to be inappropriate by some GPs, who noted that it was adding to a GPs already overstretched workload by telling patients that these social issues require medical attention:

But I think at a time when workforces and resources are overstretched, medicalising things that probably ought not to be medicalised isn't going to be helping the workforce issues. But I'm not so worried about that as I am about the idea that we condition an expectation that social problems will become medicalised. We will take on responsibility for it. (GP_001)

GPs considered the risks associated with encouraging people to visit a healthcare professional to address non-medical needs. This could potentially lead to an increase in patient visits and an increase in expectations around what a GP can offer. GPs acknowledged that it may be useful for them to play a part in educating their patients about the wider determinants of health and how they can address health concerns relating to these in a non-medical manner. However, they were concerned about the long-term implications of them taking on this responsibility:

...so, if I medicalise it now, they will forever more think that same experience is a medical problem they need to come back. So sometimes medicalising can disempower people and things like that, so actually if we have a whole social understanding of...so having these interventions there helps people to understand their health and illness in different ways. (GP_001)

6.6.1.4 Reliance on GP Perception

Due to SP services often being linked with general practices, they are dependent on referrals from GPs. These referrals are dependent on GPs having a positive perception of SP. GPs commonly offered opinions of SP and link workers often mentioned what they believed GPs thought about services. When considering their involvement in SP, many GPs acknowledged their lack of skills in prescribing non-pharmaceutical options. This led them to consider that SP should not be their role as someone else, link workers for example, could do a better job:

I think it is a huge part of our job, it's just that someone else should be doing it. It's only our job because no-one else does, which is the lot of a GP. We pick up the pieces of all

the failings of the health and social care service. We're the backstop of the NHS. So, if someone isn't doing something, we do it. It is our job, but it doesn't need to be our job. Someone else could do it better, more effectively and cheaper, I would think, which would free up our time to do what we are supposed to be doing. (GP_029)

Those GPs who had access to a SP service were grateful for the support with their workload: "It means that I haven't got to dig around, it means I can leave it with someone that knows what they're talking about and leave me to see some more patients" (GP_015). GPs also expressed gratitude for the additional options for patients:

I think it's great for the patients that they've got that option and it's showing them that health isn't just all about medicalising everything, and that actually you need to take control of your own health by exercising, eating healthily and doing those sorts of things. (GP_035)

This opinion was supported by link workers, who noted that GPs tended to be grateful to them for providing social care which is an alternative to what the GP can usually offer: "*they are very keen to work with the voluntary service and to draw from the extra support that may be available to help this type of patient.*" (LW_009). One idea that was expressed by several GPs, was their appreciation for SP services regarding reduced GP appointments. Although most admitted that it was challenging to ascertain the exact amount of time saved, most GPs acknowledged that, by patients having contact with someone who can address their non-medical needs, they are less likely to attend a GP appointment for these:

It's difficult to put it into numbers, but I think it does save us quite a lot of time, because it actually, particularly with the frequent attenders who come to the doctor because they don't know where else to go, or don't know who else to seek help from, it can often be its invaluable that you can't put a price on it, and being able to get people quickly to the right place, again you can't put a price on that, you know? I mean, the main time-saving intervention we see I think is with frequent attenders. (GP_012)

This notion was supported by link workers who noted that their presence gave service users "*a different point of contact.*" (LW_027) However, some GPs did not agree that this was a good idea: "*I think patients have to take some responsibility for themselves and doesn't that just enhance dependence?*" (GP_017).

Often those GPs who expressed concern about the potential for SP to increase their workload were those who did not have access to a SP service. They were not, therefore, fully aware of how a SP

service could impact on their work. However, even some GPs who did have access to such a service were hesitant to use it due to various factors such as expected time expenditure for referrals or a lack of belief in the usefulness of SP. Link workers mentioned that they occasionally struggled to get GPs to engage in their service: *“we found that GPs wouldn't come to meetings, they didn't want feedback, they didn't want to engage in the service”* (LW_042). Link workers stated that they frequently encountered GPs who were resistant to change: *“And then in the meeting that I came to you will get GPs who just say no.”* (LW_025) Link workers gave examples of this resistance, feedback they had received from GPs argued: *“we don't trust it, we don't think it's reliable, we don't think it's going to work, it's going to be a waste of time”* (LW_027).

Time spent practicing was noted as a potential reason for GPs' poor perception of SP. It was generally accepted that GPs who had been practising for a longer period were 'stuck in their ways', and, therefore less receptive to new concepts such as SP. One link worker noted this was particularly apparent in the way in which GPs sent referrals to SP services, and suggested that, if more traditional ways of communication, such as fax, weren't incorporated into services, referrals weren't received: *“And not all of them will refer then because some people just like to do the old, traditional fax because that's the way they've worked for 30 years. And if they don't do it that way, they won't”* (LW_003). Another idea which was repeated by a few link workers was that GPs who have been practising longer are out of touch with what is available locally: *“I find that some of the older ones, you know, they don't know about local services.”* (LW_003)

Despite this notion about GPs who have been practising longer, a few GPs noted that these GPs are likely to prescribe socially without the use of a SP service and without calling it SP:

My impression and it is just an impression is that the older GPs, or middle aged, twenty years over GP training, they probably do all the stuff already, but they probably won't call it SP, they'll call it being a GP. (GP_015)

The idea that, although some GPs might not be invested in SP services, they do offer social options to their service users and may refer to local support services, was primarily put down to the fact that, when these GPs began practising, they had more time per consultation as services were less stretched. They, therefore, may have addressed their patients in a more holistic manner. One GP also noted that males may be less likely to engage in SP:

I've been at a clinical delivery group, so an older male GP was there was like, oh, what are we doing this for, we don't need to do this, and another one was saying, why do we

want more work, and they were both male GPs. And then the female GPs out of the meeting said it was a good idea. (GP_019)

However, the GP who noted the gender divide also stated that *“it’s probably not fair to break it down completely male and femalely”* (GP_019). Instead, some link workers believed that GPs lacked an understanding of social options and this therefore impacted their perception: *“some GPs don’t actually understand what wellbeing services, what SP is”* (GP_027). This led to frustration: *“We were trying to get GPs to recognise the fact that people would benefit from services and activities that are not necessarily medical and it was like banging your head against a brick wall.”* (LW_031) Link workers considered the primary reason for this to be a lack of trust in social treatments, stemming from an absence in education on the topic area: *“I think in the clinical world, SP, there is very much a lack of understanding, or people will jump to an assumption of what it is, not having any theory behind it.”* (LW_002)

The idea that a lack of GP education around SP was a barrier to SP was echoed in the GP stakeholder group. Often, when asked about potential barriers to prescribing socially, GPs spoke about a lack of confidence in the option which was likely due to insufficient education on the topic:

From the GPs’ point of view, it would be around training and understanding and feeling confident and competent that you can appropriately prescribe in a setting that you perhaps haven’t had training for at medical school and through specialty training (GP_008)

When asked, many GPs stated that they did not hear the term ‘SP’ during their education at medical school, however, most said that they studied concepts relating to it, such as the SDH.

A negative perception of SP was reported to be a particular issue for SP services which were funded by the CCG and worked specifically with general practices, who were, therefore, reliant on referrals from GPs to meet their targets. One link worker stated: *“even the three that said they were on board, didn’t really engage with the process as much as we...as much as I assumed”* (LW_042). When asked, one GP stated that they were reluctant to engage with a SP service as they were unsure who was responsible for the service user’s health, and whether the service user would be followed up. They were concerned that their involvement would ultimately lead to an increased workload:

I think my only slight reservation with a system that was too split might be who’s taking overall responsibility for this suite of interventions, particularly if there’s an element of it having an impact on the health of a patient, there’s sort of a tendency for people to work within their little box and say that’s not my responsibility, and often when that

happens things tend to fall back to the GP to take the responsibility for it overall, so if it's increasing the kind of supervisory role of the GP, that might just add to the work rather than kind of reduce it (GP_008)

Despite the frustration felt by the link workers, most GPs were enthusiastic about the potential of SP, although many had reservations. They expressed their excitement to have someone who could support them in providing non-pharmaceutical options for their patients:

I mean, it sounds wonderful, it sounds like that would be the best of both worlds because you'd have that relationship with the GPs but then you'd have the experts that were able to do it in that field which...and would already kind of know the links and be up and running and be able to take that road (GP_008)

6.6.2 The Versatility of the Link Worker Role

The link worker role has been developed relatively recently. Its infancy, coupled with the adaptive nature of the work involved, has meant that there is no single clear understanding of the role. Discussions surrounding the work of link workers was present in both the link worker and service user stakeholder groups. Whilst GPs mentioned link workers, they did not typically discuss their role in SP. This theme was broken down into four sub-themes which represented the different and versatile facets of the link worker role: 'supported access', 'link workers as prescribers', 'coordination of support', and 'valued ongoing support'. The first two sub-themes were present in both the link worker and the service user group, whereas the final two sub-themes were only found in the service user groups, as displayed in figure 6.6.

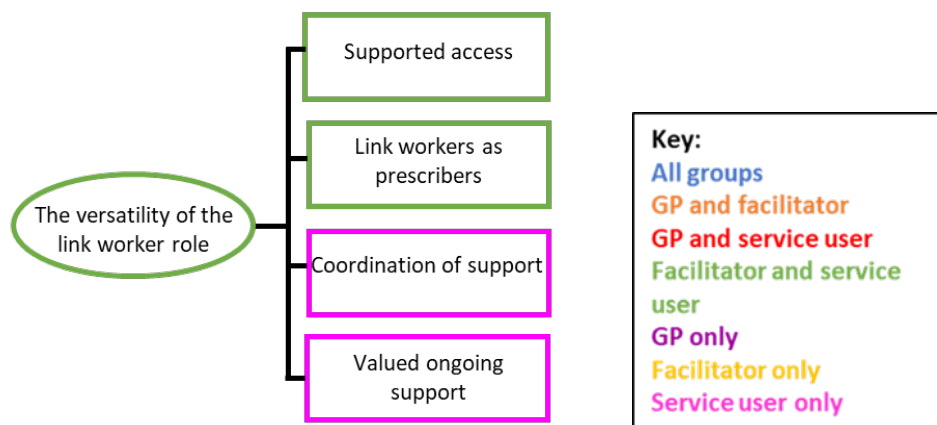


Figure 6.6: The theme 'the versatility of the link worker role' and its sub-themes.

6.6.2.1 Supported Access

Service users frequently referred to the link worker's role in facilitating access to support and services. Although some SP services have funding to run certain social interventions, such as coffee

mornings, most support service users to access existing services: “we don't provide any of those services, we help people to access the services that are out there” (LW_042). Support could be in the form of contacting suitable services to make arrangements for the service user, finding out what is available and what they would be eligible for, or assistance in the completion of forms. Link workers noted the importance of making service users aware of the support that is available to them, and supporting them to access this, they seemed to consider this a core aspect of their role:

So, part of the SP role is actually maybe connecting better with services that already exist, because there's a lot of ignorance about what help people can get, you know. So, a lot of that is we'll navigate around the system and put them in touch with things or make a referral, it isn't actually working with people directly. It's more just helping them, as I say, navigate the system. (LW_002)

Most SP services support some individuals who are not able to drive or get out of the house by themselves. The theme ‘supported access’ was also used to represent the physical support link workers provide to enable service users to access services. This could simply be arranging transport to and from a social intervention, or arranging a home visit:

A lot of the referrals that we get tend to be people living on their own, isolated, quite often housebound, difficult to get out and access services so there's a lot of things around but generally you have to go to it to access it. So, they're quite often very grateful to have somebody who can help them bring that service to them. (LW_009)

Service users also considered access to be an important part of a link worker's role. They did not specifically state this but gave numerous examples of how a link worker had enabled them to access a service and did express their gratitude for this. For example, SU_045 explained how their link worker supported them to access a social intervention:

Oh, and (link worker) actually rung up as well, for me. Which I did recognise as being a good thing, going back to your previous question. Because I, again, once I got home, I might not have done it for myself. So, she rung up, and she found out what time it started, and I might need to enrol, and everything. And she wrote things down, so I didn't have to think about anything or anything like that. Which was good. (SU_045)

6.6.2.2 Link Workers as Prescribers

Both link workers and service users referred to link worker's role as prescribers. In this context ‘prescriber’ was defined as someone who assesses a service user and determines their needs, much like with clinical prescribing. Like other themes, link workers expressly mentioned their role in

prescribing, whereas service users tended to reference their role indirectly by providing examples of these prescriptions. In interviews, link workers considered the association between the term 'prescribing' and general practice. They tended to consider themselves to be the prescribers of social aspects. This was due to their role in the assessment and diagnosis of the patient's needs. Whilst the GP may be able to recognise that the service user requires a social intervention and make a referral, it is the link worker who determines the exact requirements of the service user and provides a personalised and holistic prescription:

...is it a GP is writing the prescription saying, you need a befriending scheme, take this to there and they'll find you one or are actually we doing the diagnosis and prescribing based on some kind of understanding of that person? (LW_031)

Link workers further explained that their increased knowledge surrounding the social needs of service users, since they spend a greater amount of time with the service user, enabled them to complete a full assessment, and consequently diagnosis of their needs. Consequently, the link worker develops the social prescription, not the GP. This was explained by LW_033, who argued that "You don't get a prescription until you've got a diagnosis and they're (GPs) not in a position to do the diagnosis".

When considering their role in prescribing, link workers tended to compare themselves to GPs however, they noted that their prescriptions are not the same as clinical ones: "It's a bit more flexible I would imagine than a medical prescription." (LW_042). The constraints of healthcare were noted when further differences between clinical and SP were considered:

We also have a lot more time that we can spend with a patient, which helps us address what issues that they need. And we'll do follow ups with the patient. So, if it's not working for them that social prescription, we'll review it and change, we'll maybe add in a few extra activities which would be more suitable for them. (LW_043)

In support of this, service users gave accounts of the prescribing process conducted by link workers:

They (link workers) were talking to me about hobbies, and a bit about myself. They probably got more out of me by the questions they asked, although what I do find about (SP organisation), they don't pry. They listen, and they pick up on things. And then they see signs that they can go along with. They picked up better with...quite creative in the hobbies I like doing. (SU_045)

In SU_045's account, they describe the link worker getting to know the service user to support them develop a personalised and holistic prescription which meets their needs. Service users frequently

mentioned that the link workers were able to pick-up on the root cause of some of their issues, *“they also recognised that I needed to get out and about and meet people, because I was new to the area.”* The link worker then created a social prescription which addressed this need, *“So (link worker) suggested going on a course, like a part-time course. Which I said, yes, I’m interested. And she said, what about drawing? I said, well I’ve never done it, I’ll give it a go.”* (SU_045) This account corroborates the link worker’s belief that they are the prescribers, particularly because the lengthy process of developing a social prescription would not be possible during a standard GP appointment.

6.6.2.3 Coordination of Support

When describing the support that they had received from SP, service users often referred to the role link workers played in the management and organisation of different aspects of their care. For example, one service user described how they were trying to put together a care package for themselves and their partner but were struggling to manage the different bodies before a link worker *“started to coordinate between the various bodies”* (SU_046).

6.6.2.4 Valued Ongoing Support

Whilst link workers referred to phone calls that were made to service users a few months after providing them with a social prescription to see if they required further support, service users often referred to the sense of continued support from link workers: *“His name is (link worker), and he is always there. He’ll say to me, if you have any problem, just give me a ring and I’ll see if I can help you.”* (SU_026). Another service user mentioned how the contact with their link worker made them feel supported: *“She’s rung me up from time to time, just to see, you know, am I okay. Nothing heavy, it’s just all like she’s a friend, but still on a professional basis.”* (SU_045). Service users noted that the ongoing support they received from their link worker meant that they did not feel awkward asking for further support and were able to ask about issues which they may have not otherwise sought help for. Service users used language that gave a sense of them feeling supported and content with the care that they are receiving, for example: *“So that’s nice to know, that he’s there at the end of the phone if I need any help”* (SU_026) and *“if I need to know anything, he’s there for me”* (SU_030).

6.7 System Integration

System integration (macro integration) refers to the linkage of healthcare services through rules, physical space, structures, and policies (Fares et al., 2019, Valentijn et al., 2013). Encompassed in this are the resources available to support integrated care, such as SP (Valentijn et al., 2015). The resources needed for SP were frequently discussed during interviews with stakeholders, most commonly, the need for adequate funding was considered, although, what adequate funding is was never determined.

6.7.1 Resource Limitations

The availability of resources, such as funding, time, and practical tools was a concern in all stakeholder groups. This theme was split into two sub-themes: 'the need for financial support' and 'time pressures'. As displayed in figure 6.7, all groups discussed the importance of financial support, however the second sub-theme was only found in the GP and link worker groups.

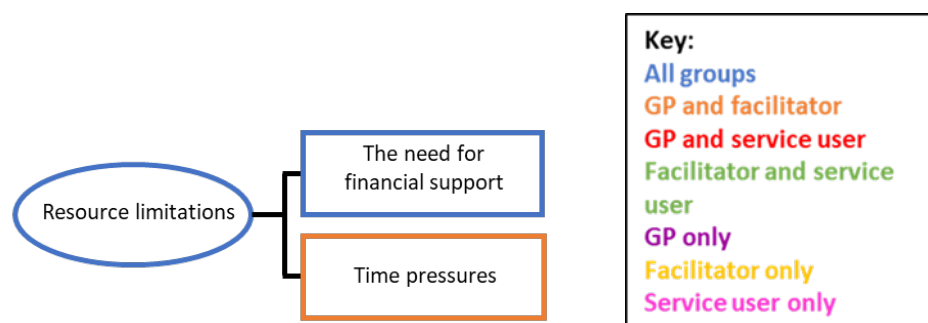


Figure 6.7: The theme 'resource limitations' and its sub-themes.

6.7.1.1 The Need for Financial Support

A key resource mentioned by both GPs and link workers was long-term financial support. This was considered to be vital to the success of SP projects:

...whoever funds it has to invest money for it to be done properly. It isn't something that, oh, it's just a bit of SP, it doesn't actually need investment. It can't be that tokenistic. And I know other SP projects where they haven't been funded hardly at all, very little amounts of money, there's just way...you might as well just not bother, because there's just no way. (LW_002)

Funding was also considered to be an issue from a sustainability standpoint. One GP noted that the "third sector are constantly scrabbling around for funding and it's only going to get worse, if that's (SP) being relied on to be the solution, I'm not sure that that's necessarily sustainable." (GP_008) This lack of certainty around the longevity of services impacted GP's decision to refer service users to SP services. One link worker described this:

I think they (GPs) were also a bit scared that the service didn't have sustainability that it might disappear at the end of our funding, that they'd invest, particularly for some of their patients where they're quite complex patients anyway or they might struggle to get them engaged. So, if they've really sold our service and then our service doesn't exist in three months' time, they've lost faith themselves, or they think, well, actually now that patient's not going to trust me, so how are they going to trust me with anything else. (LW_042)

Link workers frequently noted the connection between a lack of financial support and the often-short-term nature of SP services and social interventions. They stated that they believed this is what dissuades GPs from making referrals:

Just going back to what I think might prevent people, GPs referring more, is just the fact that, say, if they've been a GP for 20 years, they might have seen about 40 of our services come and go...And because they're so short term and even us sending a letter to GPs saying we have got funding until October, in their life, that's not very long, in their career. (LW_027)

Link workers stated that *"it changes month by month really in terms of what's available in terms of funding"* (LW_009). This affects how the services are regarded by health professionals, *"It's not reliable for them, I understand that."* (LW_027). Some link workers had received feedback from GPs regarding this issue: *"they've said that we've seen services pop up and go down all the time."* (LW_028) This feedback was supported by GPs:

Because we started off in (location removed) where we could prescribe exercise on prescription, that sort of thing. Today we have it, tomorrow we don't have. Today (location removed) has, (location removed) doesn't have... So, it's a lot of confusion. But that, we have to keep up with the changes. (GP_006)

This lack of consistency in the availability of services was a key barrier for the lack of prescriptions coming from GPs by link workers. GPs corroborated this: *"That's one of the reasons I'm not really trying to keep track of what's available, because I've known from other GPs that these things can come and go very quickly"* (GP_015). Moreover, GPs who commonly expressed their concern about referring service users to services which may not exist in a few months, therefore, meaning the patient is then back visiting their GP for the same issue.

Link workers also considered the impact of a lack of funding on the capacity of their services, particularly how a lack of funding often meant that services were being run by a single person or a

small number of people. This impacted on the level of service that was able to be provided to service users and the number of service users that could be supported: *“one person can’t be everywhere at once”* (LW_009).

Finally, GPs also spoke about their reservations in prescribing socially due to the costs incurred by service users. For example, attending a gym can be expensive and is not something everyone can afford: *“But if they can’t afford it, so what’s the point of sort of making them feel bad about it?”* (GP_006) Service users supported this idea when they mentioned the often-high cost of social interventions or social activities. They spoke about how this restricted them in what they were able to do as *“it’s a lot of money if you ain’t got it.”* (SU_039).

The financial impact of attending a social intervention was also noted in terms of transport to the location and childcare: *“...issues around cost or childcare or physical access, the patient’s level of mobility or access to public transport or personal transport.”* (GP_011) Service users echoed this. One service user noted that to attend a social intervention *“You got to have somebody by car to bring you.”* (SU_038). This was a common issue due to many service users being elderly or disabled meaning they had to rely on friends and family to drive them which, therefore, restricted their lifestyle: *“...most of my friends...a lot of them have passed away, but others have also given up driving through health reasons. So, I have to rely on family mainly, but of course family are at work during the week”* (SU_026).

GPs agreed that this was a barrier to success, also noting how this can perpetuate an issue by causing people to become isolated:

Sometimes people’s mobility, as in if they don’t have a car, you know, and if they are very short on finances, if they’ve got to travel to something, they are not going to be able to, and sometimes people, if they have got lots of, hordes of children that they can’t easily transport around the place. Sometimes people’s physical mobility if they are isolated in the home. (GP_017)

6.7.1.2 Time Pressures

Both GPs and link workers discussed how time pressures impacted SP. However, GPs were the only stakeholder group to consider the time needed in primary care for SP to be implemented: *“...as GPs we don’t have the time to say, well you could be doing this or what about this, and we don’t have the time to figure out what’s available and what we could do, what the patients can do.”* (GP_017) In almost every interview GPs presented time as a barrier to SP. The short length of a standard GP consultation and the lack of admin time for which GPs must research social interventions and complete referral forms were the main issues raised. One GP stated: *“I haven’t got the time to be*

writing letters, left and right" (GP_015), arguing that the increased amount of admin SP created made GPs less likely to utilise it. Another GP explained how a lack of time impacts on SP:

...we might be very naughty and not open those doors and not act on those cues, knowing that it might balloon a ten-minute consultation to a 20-minute consultation and time pressures and things. We would always say time is important, but it's always whether we are the right people to be doing it. (GP_021)

Here the GP questions whether GPs should be prescribing socially due to time pressures. Access to SP services would alleviate some of this time pressure as it would only require the GP to complete a referral form for the service user. However, GPs commonly mentioned that a key resource impacting SP is their lack of access to a SP service. As some GPs do not have an active SP service in their locality, if they were to socially prescribe, they would have to arrange it themselves: *"I don't think that there are any projects that I know of locally unless they would be a referral to a healthcare co-ordinator for dementia but unfortunately that's been withdrawn from us recently."* (GP_018). This inconsistency in resources available to GPs was commonly cited as an issue: *"a few years ago there was a book produced for Coventry, of third sector resources, but I have to say I haven't seen one recently, and that might be as much as eight or ten years ago that that appeared"* (GP_013). This lack of resources means GPs are required to carry-out the SP process themselves with little guidance (signposting and SP light, Kimberlee (2015a)): *"I haven't got any leaflets. There is nothing that I have that would say, this is what SP or social intervention is"* (GP_021).

In contrast to GPs, link workers considered the impact time pressures had on staffing in SP services; this is typically linked with funding. Some services were run by a single member of staff or very few staff members, this impacted the quality of the service which could be provided: *"one person can't be everywhere at once"* (LW_009). One link worker stated, *"we need to be really careful not to promote it because we wouldn't be able to meet the need"* (LW_032) due to the limited capacity of the service. Another link worker described how more staff would support them in developing their service: *"Because obviously, it is just myself. It would help to have additional staff to take referrals, to track outcomes, keep the database up to date attend meetings etc."* (LW_009)

6.8 Functional Integration

Functional integration spans the micro, meso, and macro levels and refers to the extent to which support functions enhance service delivery and integration at different levels (Valentijn et al., 2013). This includes functions such as information management (Shortell et al., 1996). Pescheny (2019) presents an IT system shared among front-line providers, and along the care continuum (GPs, link workers, and providers in the VCSE sector), as an example of a support function in SP. The lack of data management systems in integrated care has previously been identified as a barrier to integrated healthcare (Auschra, 2018, Cooper et al., 2016, Ling et al., 2012, Parkin, 2019), and this was echoed in this study as GPs and link workers considered the way data are stored and analysed in SP services. This is presented within the theme ‘data management to support work and evaluation’.

6.8.1 Data Management to Support Work and Evaluation

Both GPs and link workers discussed the need for data management strategies and tools to support data collection, referrals, and the creation of evidence. This theme was split into three sub-themes: ‘the importance of data management tools’, ‘challenges with accessibility’, and ‘limited evidence availability’. Figure 6.8 notes the stakeholder groups in which each theme was present.

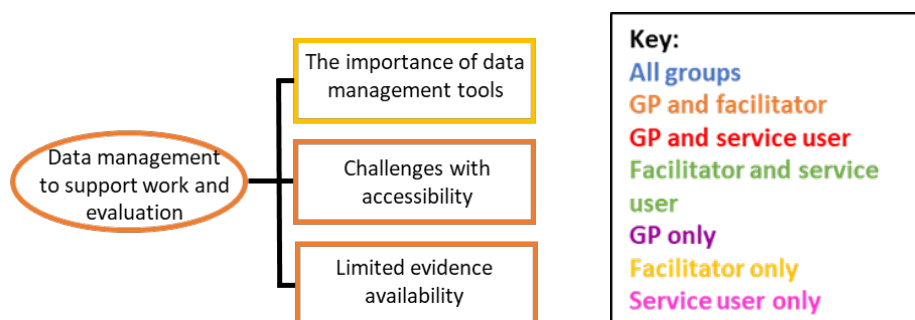


Figure 6.8: The theme ‘data management to support work and evaluation’ and its sub-themes.

6.8.1.1 The Importance of Data Management Tools

Due to the poor quality of the data collected for study I, questions relating to data collection and management were asked during interviews with all stakeholders. However, this area was only discussed in detail by link workers who described their data collection and management processes and how this impacted their work and their service evaluation.

Many link workers stated that they were recording all service user data on Excel spreadsheets: “I’ve developed a spread sheet.” (LW_027), and some services reported that they held only paper records: “We have paper files”. Link workers reported issues with the data quality of both paper and Excel records: “...the quality of data is not good enough.” (LW_033) They also noted the challenges they faced in evaluating their service: “The other issue is getting data out of it (Excel spreadsheet)”

(LW_033). One link worker explained: *"I think we've been really, in a way, quite ambitious in what we've been trying to prove and what we've been recording on the dreaded spreadsheet because it's just got bigger and bigger"*. (LW_031)

Some link workers questioned the need to collect service user data given their inability to manage and evaluate it: *"Sometimes I think, do I need this information? Why am I collecting it?"* (LW_028). They also expressed frustration about collecting data requested by funding bodies which was not then used: *"So we've been recording everyone's NHS number, but not necessarily...we haven't actually had to show it to anyone yet."* (LW_027). This frustration links with the reasons for poor data collection discussed in section 5.4.

Access to a data management software would decrease the time required to perform analysis on service data and thus free-up link worker's time to perform other duties. Some link workers expressed interest in developing a data management system for their service to support outcome measurement: *"We need to track outcomes, so, we would be very interested in developing that aspect to allow us to gather accurate data"* (LW_009) Those services interviewed who did have access to a data management system reported positive experiences:

It's brilliant because it means that, particularly as our organisation or our service has grown, that multiple people can be on it at any one time, updating in real time. And we can shut down certain aspects, so depending on your role within the organisation, you can only see certain stuff. But then you can also have a monitoring overview at a higher level about everything that's going on. (LW_042)

Link workers explained how this enabled them to collect multiple outcome measurements such as *"WEMWBS, which is the Warwick-Edinburgh Mental Well-being scale"* (LW_042), and therefore increased their ability to produce outputs on their services' work: *"Pulling off reports and things much easier."* (LW_043) One link worker explained that with the data management system they were able to produce reports independently, therefore not requiring specialist support and not being a burden on time:

I can do all my reports from it, you guys can see. Referral numbers, it will just show that, and it's got all the numbers for each locality, how many's coming in, how many action plans. So, it's good for instant, oh, where are we at with stuff, but also for detailed data. (LW_002)

However, link workers explained that they had to apply to a charitable trust for extra funding to develop the system rather than receiving this through their typical funding channel:

Yes, and we applied to that from a voluntary trust. So, most of our funding has come via the CCG or the county council, but we accessed some from a charitable trust for the specifics of engagement with voluntary and community groups (LW_042)

Despite the obvious need for such data management systems, as explained by those services interviewed without one, the funding for this is not available as standard to services. This supports the theme 'the need for financial support', as, without this, such data management systems cannot be purchased and the positive outcomes, such as better data analysis, cannot be gained.

Regardless of having access to a data management system, due to a lack of portable electronic devices, many link workers reported that they collected data from participants by making notes on paper: "initially it's pen and paper to collect information from the patient" (LW_002). This information then had to be input onto a computer later: "when we come back, we have to put all of our information on the star (data management system used), which is we write it up and then we have to type it up again." (LW_042). Like the informal reports gained in study I, and linked with the theme 'time pressures', link workers noted that inputting data into the system added to their workload: "it's a great system, it's just balancing workload and having time to input as well." (LW_003). Moreover, one link worker highlighted how both the time pressures and the manual entry of data from paper records leads to poor data quality:

when I'm doing reports, if the data's not been put in, I can't do accurate reports. But then obviously with such busy workloads and lots of referrals coming in, the data's only as good as what you've got in there. And if there's lots of gaps in the data, it's a bit pointless (LW_002)

One link worker noted that, whilst a data management system would be of use for producing reports, they did not believe that SP outcomes could be fully captured by quantitative outcomes, and, therefore, qualitative capabilities would need to be built in: "... you are dealing with that social intervention, and therefore stats are not always the best way to measure that." (LW_010) They argued that:

A lot of our feedback and outcomes will need to be in the narrative form. So, it's about, you know, consistent, valid, reliable data, but that can be narrative, and I think that

would be valuable data to collect but because it would also shape the service in a much more specific way to client needs. (LW_010)

This examination of the wider factors which impact service users is not unlike what the service in study I attempted to achieve with their collection of social, environment, economic, and wellbeing outcomes, however, the measurement of these needed refining so that the data were meaningful.

Finally, despite link workers in study I suggesting that they were unaware of data security and the ethical implications of insecure paper records, some service users noted the security benefits of electronic data management systems: *"And it's more secure as well. There's always a risk when you have paper, lots of paper, it might get mislaid, you know, or something like that. Left on a train."* (LW_003).

6.8.1.2 Challenges with Accessibility

Both link workers and GPs discussed the referral process and how this impacted the accessibility of SP. Link workers compared their strategies to those used in primary healthcare, expressing an "us and them" mentality which is in opposition to the integrated nature of SP: *"...because we don't work electronically whereas these guys are all fancy."* (LW_028) and *"they're all working electronically"* (LW_027). This difference between data management in healthcare and SP highlights the lack of integration between the different services. This was particularly apparent when link workers discussed referral processes. Without data sharing, or electronic systems, many services relied upon *"the old, traditional fax"* (LW_010). However, link workers expressed issues with this, and questions were raised about the security of faxing potentially sensitive information:

GPs do fax over referrals, which go to our office, which is secure because it's behind a locked door and the fax machine's behind another locked door, so it is super secure, but it's got to go through a bit of a journey before it gets to us, as opposed to direct email.
(LW_009)

Due to this, and the fact that the information on the fax then needed inputting onto the data system used link workers expressed their desire to remove faxes as a referral option and use an electronic referral form: *"I think really what be good to do is knock out the faxes completely"* (LW_010). However, they explained that this would be challenging due to the number of different systems used in healthcare, and the barriers to getting their form uploaded onto these: *"it's all the referrals built into all of the 46 different systems, to then try and get them to change another referral form and take off the fax number, is going to be a bit of an issue."* (LW_010)

Some link workers interviewed reported that they had an electronic referral system. In some cases, this was a form on their website which could be completed by healthcare professionals or individuals. However, one link worker noted that often GPs would phone them instead, therefore bypassing the form and this created issues in data completeness: “I encourage people to use the online form because I know what’s on that is what I need” (LW_009) In other services the referral form was built into the referring organisation’s computer system which streamlined the referral process:

So, in terms of the information that we receive off the referrer, if they've filled out a referral form, which we ask all our referrers to do, we find out their contact details, so their name, date of birth, address, telephone number, et cetera, the reason that they've been referred. Sometimes it's either in text or we've also got like a little tick box of options for them to tick against six, seven, eight key reasons why somebody might be referred, so they can just highlight them to save time. Also, the information about contact details is usually self-populated by the organisation, to make it quicker for them.
(LW_042)

Whilst GPs did not generally discuss the referral process in detail, one GP was positive about the inbuilt SP referral form at their practice: “It’s probably one of the simplest referral forms we’ve actually got, so I would say to people there’s no excuse not to use it.” (GP_012) The benefit of such an inbuilt form is also evidenced by another GP who discussed the different referral pathways to the SP service in their practice which did not have such a form:

So formally the process is nightmarish, because there’s always a different form in a wrong place with information that doesn’t seem relevant and why do you really need a form filled in like that? (GP_001)

Link workers expressed that their “gold standard would be that GPs could pull it up on screen” (LW_010), which is like the inbuilt forms discussed above. However, they are expressed interest in an integrated referral system in which data sharing agreements were set-up as currently they are “not on an even playing field with information sharing (LW_031) with healthcare. Data sharing would enable services to obtain necessary information on service users and therefore reduce the gaps in data obtained. It would also prevent work with the service user being duplicated:

...able to access other people’s databases, integration, so that actually we do know, if Social Services are already going in. ‘Cause actually, not to know that sometimes can be deleterious to the client and / or we’re doubling up or duplicating but I think that, again,

part of that, which is why SP fits into the new development, is part of that whole development, you know, does everybody know what's happening with that client and, don't let's all duplicate it now and ask them the same question 20 times. (LW_009)

However, one link worker did acknowledge the potential issues related to data protection and governance with this type of system: *"obviously, information governance of which we, you know, are obviously part, asks what do we need to know?" (LW_009)*. They also emphasised data protection issues with other referral routes such as email and phone:

That varies tremendously, because for some people they send through an encrypted email. Some people phone us up. Some people don't use the form at all and give us all the patient details in an email. So, information governance is very interesting. (LW_023)

Often GPs noted the challenges they faced in accessing SP services on behalf of their patients or making a referral. Some GPs stated that this was due to the forms which need completing: *"it's a real pain in the arse"* (GP_007). This is linked with the 'need for financial support' theme as, due to the ever-changing nature of the services, the form which needs to be completed to make a referral keeps changing: *"So formally the process is nightmarish, because there's always a different form in a wrong place with information that doesn't seem relevant and why do you really need a form filled in like that?"* (GP_001). This GP also refers to the suitability of the referral form. This was mentioned by other GPs who questioned whether the level of detail required by the forms was necessary. GPs also spoke about the difficulty accessing social intervention services, therefore referring patients directly to a social intervention rather than a SP service:

...there are already so many bits of paper, different services that can be referred to, community services, hospital services, you know, everything else that's available, and already people, it's sort of word of mouth as to which ones you know about and which ones you don't, if it's kind of another bit of paper talking about this gardening club, another bit of paper talking about something else, each GP would only ever know a handful of what's available. (GP_008)

This GP describes a common concern amongst GPs. Many mentioned the difficulty of keeping track of available services, many of which are in the VCSE sector.

6.8.1.3 Limited Evidence Availability

Both GPs and link workers identified a dearth of supporting evidence to be a barrier to SP. In many interviews GPs stated that the lack of evidence made them less likely to utilise SP: *"Maybe some of us would find that easier to do if it's an accepted and proven mode of treatment rather than kind of,*

oh, we think that would be good for them. So, I think evidence is going to be key” (GP_017). GPs were hesitant about SP’s impact on health: “I don’t think the evidence really supports that it’s very effective either in its current form” (GP_029). Link workers were also concerned about this lack of evidence and believed this to be a key barrier to the uptake of SP in primary care. They believed that an increase in academic work on SP would support its implementation:

...it comes back to an evidence base we need to generate now, I think we’ve an emerging evidence base which is fine, I can cope with emerging evidence bases, but we do need a lot more academic work, for want of a better word, public health academic, your type of work, to actually look at cost value, effectiveness, where is it more effective than less effective? (LW_010)

Link workers also spoke about the need to prove to funders that SP is effective before funding can be guaranteed. If more evidence were available, it could be used to support applications for the funding of SP services:

It’s chicken and egg stuff until you’ve got the evidence to say, we are getting a lot of people who would like this service, would benefit from it, and we know they’re going to improve their health outcomes but there’s no funding for it... (LW_009)

However, when considering the need for evidence, link workers were concerned about their ability to produce it due to their limited resources: *“you need to generate that evidence base in fairness with limited cash” (LW_009). This is discussed further in the theme ‘resource limitations’.*

Due to limited outcome measures and evidence, the use of follow up data as evidence to support the effectiveness of SP was routinely discussed by both GPs and link workers. This type of evidence was considered important to elicit funding and to encourage GPs to make referrals to services. However, GPs stated that they rarely received feedback and *“never really quite knew who actually really went” (GP_021). Link workers also mentioned that they did not often receive feedback once they had referred service users to appropriate social interventions: “we don’t formally follow up where they’ve gone” (LW_024). This, therefore, prevents them from providing GPs with feedback. Link workers acknowledged the issue this caused: “They could say this project has given a thousand people this information but without following that up you have no idea what that’s actually done” (LW_031). GPs suggested that this follow up information is vital for gaining assurance that SP is both a legitimate and a potentially successful intervention which therefore increases the number of referrals they are likely to make to SP services:*

I suppose knowing that it is effective, so where you're searching your Vanguard site, if they actually followed and tracked people and said that this intervention is really helpful, and if we've got evidence base to show actually this route is positive. Then it would become more normal, it would become more, actually this isn't a cope out, this is actually an active treatment model. (GP_017)

Link workers noted that they considered the fact that GPs continued to refer service users to their service informal evidence of its effectiveness: *"they are still referring, so they must be happy with what we're doing"* (LW_027). This acted as their own form of evidence of effectiveness, as they assumed that referrals would stop if GPs were not happy with the service.

Both GPs and link works expressed concerned about providing evidence for commissioners and funders to prove the effectiveness of SP services. Link workers in particular, frequently referred to the pressure this put them under:

I think a lot of commissioners are interested in results, which is very hard to prove when you're still in the process of collecting that information. It's hard to say, okay, in ten years' time, it's going to have saved you X billion pounds, because it hasn't happened yet. (LW_042)

One link worker clearly described the difficulty they had faced when trying to prove the worth of their service. Mostly due to the preventative nature, meaning benefits are not always clear or immediately apparent:

...it is so difficult to prove that because you signposted somebody to Pilates, they improved their core strength, which mean that they didn't slip on the ice outside, which means they didn't break their hip, which means they didn't go into hospital, which means they didn't catch MRSA or whatever, which means they didn't then get pneumonia and deteriorate and used a lot of resources. That preventative angle and measurement, there are a lot of extraneous variables, but also there's so many risks and ifs and buts and maybes, that it's very difficult sometimes to prove. (LW_043)

The benefits seen from SP are often long-term, meaning it is difficult for those services which are funded for a short period of time to prove they have been effective. Due to the nature of the benefits seen being different for each service user, and the fact that these benefits cannot easily be quantified, proving worth in a format suitable for commissioners was considered to be challenging by link workers and GPs:

I think it's really hard to numerically prove the worth of the service. So, I think if people want to take it up and if people wanted to commission a service, they've got to come and see it in action and speak to the people using it and speak to the patients who it's made a difference for. (GP_012)

Link workers also mentioned that the lack of data sharing agreements between themselves and general practice made it difficult for them to meet the needs of the funders, particularly in relation to a reduction in GP attendances: *"...we're not on an even playing field with information sharing either. We can't prove that because we don't know how many times that person's been through the GP's door."* (GP_031) This is considered further in the theme 'data management tools to support work and evaluation'.

6.9 Normative Integration

Normative integration is less tangible than functional integration, it provides a common and informal frame of reference, culture, goals, and values which bind together all levels of an integrated system (Fares et al., 2019, Valentijn et al., 2013). The creation of a shared culture and understanding across organisations, with coherent norms and goals for practice, is thought to facilitate coherent services (Suter et al., 2009). This is important in SP given there is currently no widely agreed definition of SP (Carnes et al., 2017, Polley and Dixon, 2016), and the aims, referral routes, delivery models, and level of support offered varies between services (Bertotti et al., 2018, Husk et al., 2016, Woodall et al., 2018); consequently the application of the concept is inconsistent. Discrepancies in the understanding of, and language used in SP found in the interviews conducted are presented in the theme ‘discrepancies in knowledge and understanding’. Normative integration highlights the importance of a shared vision and culture, and, therefore, clear understanding and expectations of a service. This notion is present in the themes ‘mismatch of expectations’ and ‘service user reluctance’.

6.9.1 Discrepancies in Knowledge and Understanding

During interviews, all stakeholders displayed differences in their knowledge and understanding of SP, and often commented on other stakeholders’ understanding. This theme was divided into three sub-themes: ‘limited awareness of SP’, ‘defining SP’, and ‘inconsistent language’. Figure 6.9 notes the stakeholder groups in which each theme was found.

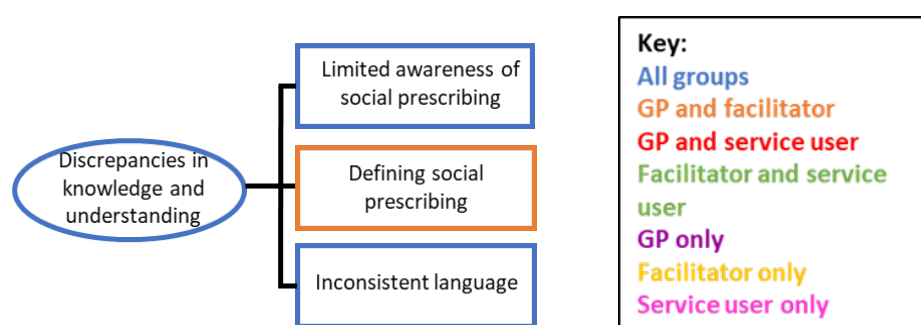


Figure 6.9: The theme ‘discrepancies in knowledge and understanding’ and its sub-themes.

6.9.1.1 Limited Awareness of Social Prescribing

When considering the barriers to SP, the notion of awareness was consistently raised. This was discussed in different forms. For example, GPs’ awareness of SP or social intervention services, awareness of social intervention options amongst service users, and awareness that GPs could offer social options. These ideas were discussed by all stakeholder groups. Link workers frequently questioned GPs’ knowledge of social options: “they don’t know about local services.” (LW_004) They

reasoned that even though some GPs do support service users to access services, they are often using the same services, which are not appropriate for everyone, repeatedly:

...although professionals think that they are aware and do help people to access different services that are within the community, when you actually speak to them, drill down a little bit, they're perhaps just using the same people all the time, they're not really aware of what is out there and what's active. (LW_009)

This was corroborated by GPs who argued that it was challenging to learn about the services available in the area in which they practiced due to the ever-changing nature of the VCSE sector, and the fact that many GPs practice in multiple areas:

I mean I worked in the same place for a long time and knew about things that were happening locally, but I've then worked in another place for eight months and so I didn't like know the local setup, so that would make it more difficult because you just don't necessarily know what's available. (GP_005)

Many SP services and social interventions are positioned in the VCSE sector. GPs argued that this made it difficult to 'keep track' of what was available, and meant that, if a new service opened, they may not be aware of it. Link workers agreed with this, they consistently referred to the issue of making GPs aware of their service: *"if there's a new service opened up, or actually it might be an existing service they're totally unaware."* (LW_004) One GP suggested that a new service *"needs to be well advertised and CCG meetings, things like that where you could tell that all the local GPs that this was being rolled out"* (GP_035).

During interviews, service users were asked if they had heard of the social intervention that they attend prior to them being referred to it, all those asked responded *"No"*. Some service users stated that, if they had not been referred to the social intervention, they would not have thought to look for something similar as they were not aware of their existence. Link workers supported this and one stated that the younger generation were the most unaware: *"a lot of the younger people we see just don't seem to be aware of a lot of the services that could be out there to support them"*. (LW_025) This lack of awareness amongst service users supports the need for SP services to assist service users to access the necessary support. When asked whether service users were aware that their GP could offer non-medical or social options to address issues, all service users responded *"No"*, one followed this up with: *"I thought the GP was just there to dish out tablets"* (SU_044), highlighting the lack of awareness surrounding social options in primary care. Those service users who referred themselves to SP services or social interventions said they were made aware of the service through advertising

in hospitals, newspapers, and through a leaflet provided to them by a healthcare professional which, therefore, suggested that the advertisement of these services had been effective and had prevented the service user from attending an appointment with their GP for a referral.

6.9.1.2 Defining Social Prescribing

When asked to define SP or asked how they would explain it to service users, both GPs and link workers used similar terminology. The notion of intervening in a service user's life was commonly cited. Both GPs and link workers had similar views on how social prescriptions were intervening. One link worker defined this as: *"Making a difference and having something which has been inputted into somebody's life, would be the intervention part"* (LW_042). The intervention element of SP was generally considered to be when a GP or link worker does something on the patient's behalf. For example: *"...if you actually organise something for somebody and, you know, arranged something to happen for someone or someone to go and do something rather than just say what about if you go and..."* (GP_017). GPs commonly considered SP to be intervening when they performed an action on the service user's behalf, usually if they believed the service user would not do it without some help: *"I'm being a little more proactive perhaps. So, I might say, I think you should ring Help the Aged or I might...if I'm doing intervention, I might ring them for them and say, this person needs some help"* (GP_017).

The fact that SP addresses non-medical, or non-medical, concerns was also routinely cited by both link workers and GPs. SP was generally thought to be those things that are *"non-medical as outside of a biomedical"* (GP_001) model. SP was also often described as giving GPs another option for their service users to complement, or instead of, clinical options:

I think it's an interaction that's essentially non-medical really. So, it gives the GP or the prescriber another option, maybe to look at the patient in a slightly different way, recognising that there will be other things going on with that person's life that can't just be solved with a medication. (LW_003)

SP was also described to 'fill the gap' left by social and healthcare services by supporting patients with other concerns to access existing support:

I think for me SP means the things that social services don't do, and I think the things that the GP doesn't do medically, so it's all the other interventions that are out there that I think often we don't know about, so things like voluntary sector organisations, you know, church organisations, there are lots of organisations out there that aren't run by social services and that aren't medical that we often don't know about. (GP_012)

Link workers often spoke about their role in connecting service users to pre-existing support. They tended to emphasise that their role was not to provide social interventions for service users but instead to link them with appropriate support. They described SP as *“a way of connecting patients usually in a primary care setting, but it can be in a secondary care setting, various different locations, to activities which can improve health and well-being”* (LW_043). Other link workers stated that they *“definitely help to create that link and connect people with outside services”* (LW_027). The emphasis here being on linking patients with external support. This was described as: *“connecting someone into a luncheon club, but it can go all the way along a huge spectrum”* (LW_002); the appropriate social interventions for the service user to be linked with are decided based upon the assessment made by the link worker.

Finally, GPs often referred to SP in an informal sense, they described it as a recommendation that they gave to patients, rather than a formal referral or prescription. This type of language was used to describe SP to service users. One GP noted: *“So SP I might say that it’s advice or I’m suggesting that this is what they do.”* (GP_016). Another stated that they understood SP to mean: *“a recommendation of things that you can offer patients to at the end of the day help their physical or mental health but they’re not necessarily...they’re not like medications.”* (GP_005).

6.9.1.3 Inconsistent Language

All stakeholder groups referred to the unclear language surrounding SP. As discussed in the theme ‘limited awareness of SP’, when asked if they had heard of ‘SP’ all service users replied *“No”*. A few were able to guess at what it might be by breaking down the phrase: *“Is that a number of people prescribing? I really don’t know; I’d be guessing at it”* (SU_047). This lack of understanding with the service users suggests that the term ‘SP’ is not being used during the referral or SP process.

This idea was corroborated by GPs who often stated that they had *“never used the term”* (GP_021). Others stated: *“I don’t use the word prescription at all. I don’t use the word social at all”* (GP_015). Instead, GPs said that they *“would probably just talk about the individual activity rather than give it an umbrella name”* (GP_005). One noted that they *“tend to use very lay terms and say, these kinds of things can help you with X, Y or Z”* (GP_015). Thus, GPs discuss the potential social intervention, rather than terming the whole SP process. Link workers said that, rather than using the term ‘SP’, they described it differently for each service user dependent on the social prescription they had received. They described this as being challenging: *“We’ve only just got our heads around - well, I have - only just got my head around explaining to a patient who we are and what we do, because it’s different for different people”* (LW_004).

This lack of use of key terminology was rationalised by GPs as preventing service user's confusion: *"I think if I went to a patient, I'm going to undertake some SP with you, they'll look at me very oddly and go, what the hell is he talking about"* (GP_021). Link workers also mentioned that service users would not understand the key terminology. They rationalised that this is because they only know the service that is going to help them, as opposed to an overarching name for the type of referral:

If you said social prescription, they'd go what the hell, social prescription, they wouldn't even know. Or a social intervention, they wouldn't put it as a label. They just see this as a service that's going to help them to improve their quality of life and get some issues resolved. (LW_002)

A GP described why they do not use the term 'SP' with their service users:

The trouble with social...the term social prescription is social has connotations of deprivation in the welfare state and that is an issue...Socialism has in the near liberal era become a bit of a dirty word and therefore SP could be kind of thought of as part of that and so will probably turn off...turn people off. So, having something that has more of a kind of public health...more of a gain-based message might be better. (GP_007)

The idea that the term 'social' had negative connotations resonated with many of the GPs interviewed. Many of them were concerned about the term 'prescribing' which has strong medical connotations. This is an issue as SP aims to de-medicalise issues that service users have taken to their GP and, by terming it a 'prescription', it may perpetuate the assumption that the service user's issue is medical. However, both GPs and link workers considered the appropriateness of the term for use amongst healthcare professionals:

Well, the use of the language might be in making the case to GPs because it's language they understand. It's like you do prescribing and we do SP. I think it's language you'd use to sell it to them. (LW_033)

Link workers thought the fact that the term 'prescription' is familiar to GPs made the concept more relatable. So, even though it is a medical concept to describe a social concept, the GPs are the ones who usually make the referrals that the SP service are dependent on. The term 'prescribing' gives SP a level of authority for GPs, and therefore was considered to make it seem like a more respectable referral option: *"I think that prescribing term is just a medical...it's to fulfil some credibility with medical professions"*. (LW_032) GPs agreed with this to a certain degree. They consented that the use of the term 'prescription' made SP more likely to be accepted into general practice. However, they stated that it was not the same as a medical prescription and by calling it such it could be

confusing to both GPs and service users. Also, one GP noted that *“it sounds almost like you’re trying to convince a GP that it’s something they should be doing by calling it a prescription”* (GP_015).

Both GPs and link workers agreed that, although the language surrounding SP had some use amongst health professionals, it is not appropriate for use with service users. It is useful to have a consistent umbrella term for SP services when applying for funding and to create an understanding of such services amongst healthcare professionals, but *“It’s not useful in terms of articulating it to the people who might benefit from it”*. (LW_033) Instead, many link workers and GPs stated that they found it useful to refer directly to the service which will be supporting the service user as this is where they will receive help from, and it is not always essential for them to know the overarching term for the type of referral the GP is making.

6.9.2 Mismatch of Expectations

The theme ‘mismatch of expectations’ was only noted in the link worker stakeholder group. Link workers frequently referred to the strain they were put under by the expectations of funders, referrers, and service users. This theme was divided into three sub-themes: ‘pressure from funders’, ‘inappropriate referrals’, and ‘variation in service user expectations’. These themes and sub-themes are displayed in figure 6.10.

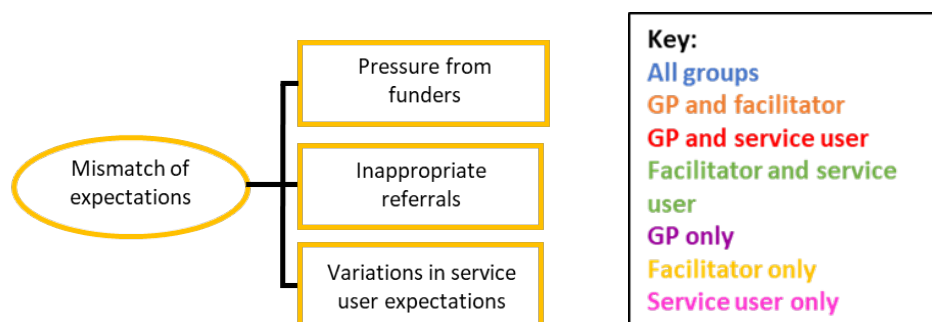


Figure 6.10: The theme ‘mismatch of expectations’ and its sub-themes.

6.9.2.1 Pressure from Funders

This sub-theme represents the perceived expectation of those funding SP services; this is commonly the local authority or charitable organisations. Link workers revealed that they felt under pressure from those funding their service. They argued that often the funders did not understand the sector they were funding:

I think that their idea of what they’re commissioning and buying and the actual reality of it are two different things. I think the person who is leading the commissioning process that’s not on our patch doesn’t understand the voluntary sector. (LW_032)

This lack of understanding was thought to lead to unrealistic or misinformed expectations:

Sometimes I think we are pushed around because they (funders) want a particular type of project and that isn't always the best outcomes for people, but they're not necessarily prepared to listen to the fact that we can influence that. (LW_031)

Link workers often remarked that they believed that they could create a more successful service without interference from funders as they were the ones with expertise in the area. One stated: *"They (funders) don't have to commission and control. They can commission and then leave it to us."* (LW_043).

6.9.2.2 Inappropriate Referrals

Link workers mentioned that they often received referrals that were inappropriate thereby meaning that the service user's issues could not be addressed through their service. Link workers believed these inappropriate referrals to be due to GPs being stretched for time:

Sometimes I think GPs can be a little bit lazy, so rather than do something that they should do themselves, they'll kind of think, oh, that's going to take me a bit of time, I'll refer it to a link officer to do that. (LW_002)

Link workers explained that, because these inappropriate referrals are often due to a lack of time, they *"can feel a little bit like they (GPs) try to get you to be an admin worker for their practice, trying to do the dirty work that they don't really want to do"* (LW_002). Link workers thought that often GPs and other referrers expected to be able to refer service users to them, instead of spending the time locating the appropriate place to reduce their own workload.

6.9.2.3 Variation in Service User Expectations

This sub-theme captures the disparity between service user's perceived expectations of SP services and the reality of what they can offer. Frequently, link workers mentioned that some service users *"think you can help with everything and anything."* (LW_027) They described this as a barrier to SP because *"when they (service users) realise no service can do that for them, then they can get a bit despondent"* (LW_003), which can result in the service user prematurely disengaging with the service. Link workers also noted that some service users did not expect to have to be so actively involved in their treatment. This was not conducive to SP which requires the service user to take responsibility for their health:

I suppose some of it has got to be, like anything in life, you have to take responsibility for yourself. You can get help and support but it's a two-way thing. And some people would be,

oh, I don't think I should have to do it, and then can get a bit...I suppose their expectations then if you're going to come in and solve all my problems. (LW_003)

Link workers claimed that the amount of engagement involved in a social prescription occasionally resulted in service users disengaging with the service. This was likely because they had expected a more paternalistic service.

6.10 Non-Thematic Results

During the analysis procedure, some non-thematic findings which were relevant to the research aims were found. This included information relating to the social prescription 'journey', specifically the different access routes and examples of those referred to organisations.

6.10.1 The Social Prescription 'Journey'

Participants were asked to describe the SP 'journey' typical to them; figure 6.11 details the identified SP routes, specifically highlighting the access routes. Descriptions provided by GPs and service users varied dependent upon the involvement of a SP service (holistic SP). The type of 'journey' most commonly described related to Kimberlee's (2015a) SP light and signposting. Descriptions of holistic SP were only given by a few GPs and service users, but all were provided by all link workers due to their role in such services. No evidence of SP medium was found. However, a type of non-medical intervention that is not represented in Kimberlee's models was identified in the results, 'health professional provides non-pharmaceutical suggestions'. Whilst this bears resemblance to signposting in that non-medical information is offered, patients are not referred to a specific organisation, and the advice takes a more general form, therefore this was not considered an example of SP.

The typical 'journey' identified begins with a service user engaging with the health service, classically their GP. During the consultation, the GP identifies that the service user could benefit from a non-pharmaceutical intervention such as SP. It is, at this stage, that the SP journey diverges. As detailed in Figure 6.11, in SP light and signposting, a SP service is not utilised. Instead, service users are directed to an intervention by a health professional, after which improved outcomes are expected. Another option available to a GP which does not involve a SP service is to offer non-pharmaceutical advice without directing service users to a particular source of support. For example, a GP might suggest that a service user increases their level of physical activity. After this, the service user is expected to identify an intervention for themselves. The stages following this were not clear as no data were collected. However, it was assumed that the service user would carry out their GPs suggestion and therefore experience improved health outcomes.

In one of the SP holistic 'journeys' identified the GP refers the service user to a SP service. This can be done by a healthcare professional contacting the service to refer the service user or through the completion of a referral form. These referral forms are then either emailed, faxed, or posted to the SP service. The service user is also able to refer themselves directly to a SP service, removing the need to involve their healthcare professional. This is typically done online or by phoning the service. In both access routes, once a referral is received, the SP service contacts the service user to arrange an assessment. Link workers and service users described this assessment to be a detailed overview

of the service user's needs, which could last up to four hours, after which suggestions for social interventions are given. The service user then carries out the social intervention(s) with ongoing support from the SP service which hopefully results in the service user experiencing improved health outcomes.

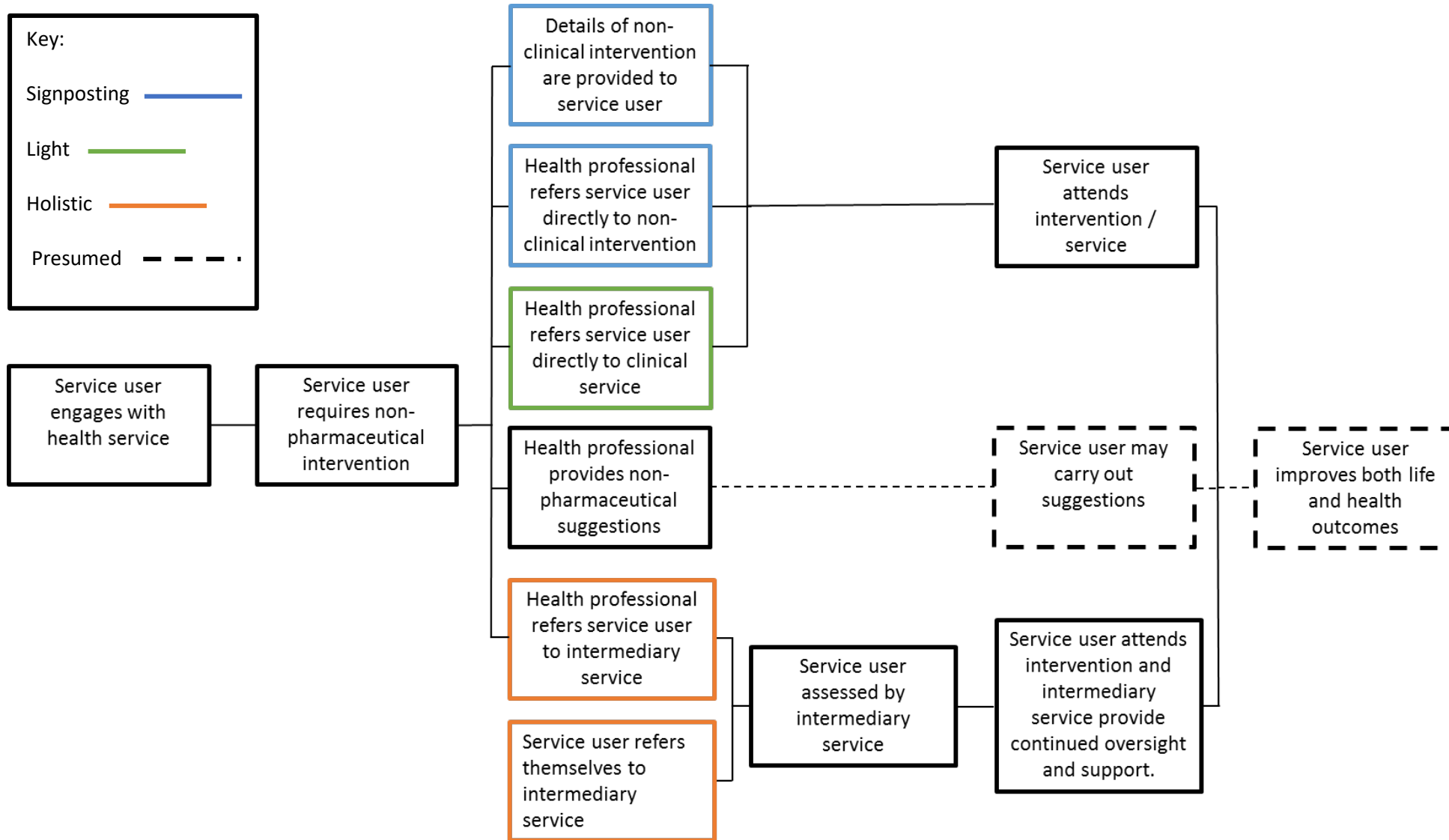


Figure 6.11: A map of the SP journey

6.10.2 Examples of Social Prescribing Referrals

Each mention of a SP referral option, or social intervention, in every stakeholder group was noted. These were then grouped into five categories: support/advice, physical activity, social, hobbies, and education. Many of the social interventions were incorporated into two or more categories, and therefore, a Venn diagram was created to present the findings. This is displayed in Figure 6.12. When considered against the Venn diagram of the SP referrals given by the service in study I (Figure 5.6) there are strong comparisons between the two. The category 'social' tended to underpin many referral options due to the indirect social opportunities involved in many activities. For example, a walking group might initially be considered for exercise, however, the group dynamic supports participants in socialising around a common activity, which could provide further benefits to health and wellbeing.

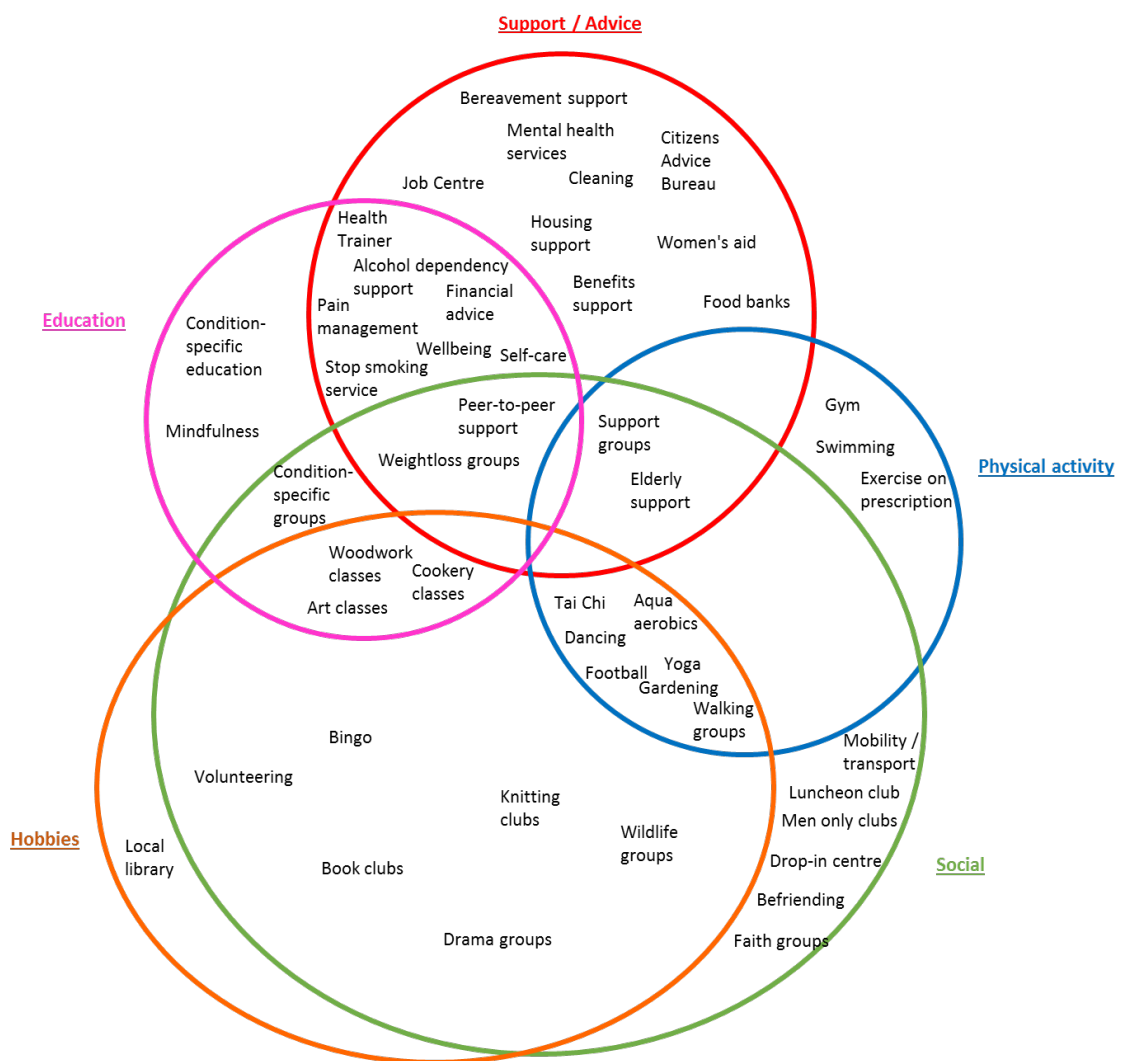


Figure 6.12: A Venn diagram depicting five categories of SP referral options

6.11 Chapter Summary

This chapter has presented the findings from study II. First it provided insight into those who participated in data collection interviews. Then, the themes identified to address research objectives two to six were presented alongside the domains of the RMIC to provide further insight into SP as an example of integrated care. Data collected during interviews that could not be analysed thematically informed the development of Figure 6.11 which details the social prescription 'journey' in relation to the levels of SP described by Kimberlee (2015a). The non-thematic data also provided insight into the types of SP referrals offered (Figure 6.12). The findings from both study I and study II are discussed together in chapter 7.

Chapter 7: Discussion

7.1 Introduction

This chapter synthesises the findings from study I and study II and the existing literature to address the research aims. A mixed method design was adopted to investigate SP in practice with a view to producing a framework of knowledge to progress understanding and implementation. The literature reviewed in chapter 3 highlighted the need for research that examines SP from the perspective of multiple stakeholders, and the lack of a clear definition of SP was noted. Moreover, despite many services reporting challenges, limited research that examined the barriers to SP in practice was found.

Consideration of the findings from study I and II revealed that, instead of a fixed list of barriers, there are a set of factors that influence SP in practice which turn into barriers when not present. These were identified from the research findings, but it was noted that there are complex interrelationships between all factors and, therefore, they could not be considered individually. Instead, they were summarised as the following five mechanisms: a clear definition and shared understanding, supportive context, sufficient and secure funding, IT infrastructure, and stakeholder 'buy-in'. When considered at a broad level, these mechanisms suggest that SP needs to be established as a reputable intervention with formal links to healthcare. Within these mechanisms, the role of GPs and link workers in the SP process is identified, and the language surrounding SP is discussed.

In this chapter, the factors which impact the implementation and delivery of SP are presented against the domains of the RMIC (Valentijn, 2016). Following this, the mechanisms to support SP to be established as a reputable intervention with formal links to healthcare are discussed. Finally, limitations are considered before the chapter is concluded.

7.2 Implementing Social Prescribing in Practice

Despite much policy and initiatives creating a supportive climate for SP (Marmot et al., 2010, NHS England, 2014), there is a dearth of practical support for the implementation and evaluation of services (Dayson, 2017). As a result, the concept has developed from the bottom-up (Polley et al., 2017a, Valentijn, 2016) and is not yet reaching its full potential (Bickerdike et al., 2017). Additionally, there is insufficient evidence to support its implementation in healthcare (Centre for Reviews and Dissemination, 2015, Rempel et al., 2017).

This research aimed to examine SP with a view to producing a framework of knowledge to progress understanding and implementation; this included investigation into the barriers experienced in practice. Study II examined SP from the perspectives of GPs, link workers, and service users. A

thematic analysis of the data collected resulted in the development of multiple themes and sub-themes, some of which were relevant to the barriers faced (table 6.4). However, during analysis of the wider research objectives, it became apparent that, if many of the elements of SP were not present, these would also become barriers. For example, stakeholders stressed the importance of link workers to deliver SP, so, if link workers were not present, this would be a barrier. Consequently, rather than fixed barriers to SP, there are a set of factors that influence implementation which become barriers when not present. This is consistent with previous research which has investigated the facilitators and barriers to integrated healthcare as one set of supportive factors rather than separate groups (Aughterson et al., 2020, Pescheny, 2019, Pescheny et al., 2018c, RAND Europe, 2012).

Findings of objectives 2-6 were combined to consider influences on the implementation of SP. The influencing factors were drawn from the themes identified in study II and the findings from study I, and were mapped against the RMIC (Valentijn, 2016); this is displayed in figure 7.1. The RMIC contends that, to deliver integrated, person-focused, and population-based care, inter-sectorial partnerships across health and social care are required (Valentijn et al., 2013). The model underpins how effort is required at multiple domains of integration (clinical, professional, organisational, system, functional and normative) for the implementation of integrated care, and that this can be defined from multiple stakeholder perspectives (Valentijn et al., 2016). In line with the RMIC, figure 7.1 illustrates that the implementation and delivery of SP involves integration across multiple domains and highlights the importance of both functional and normative enablers of integration.

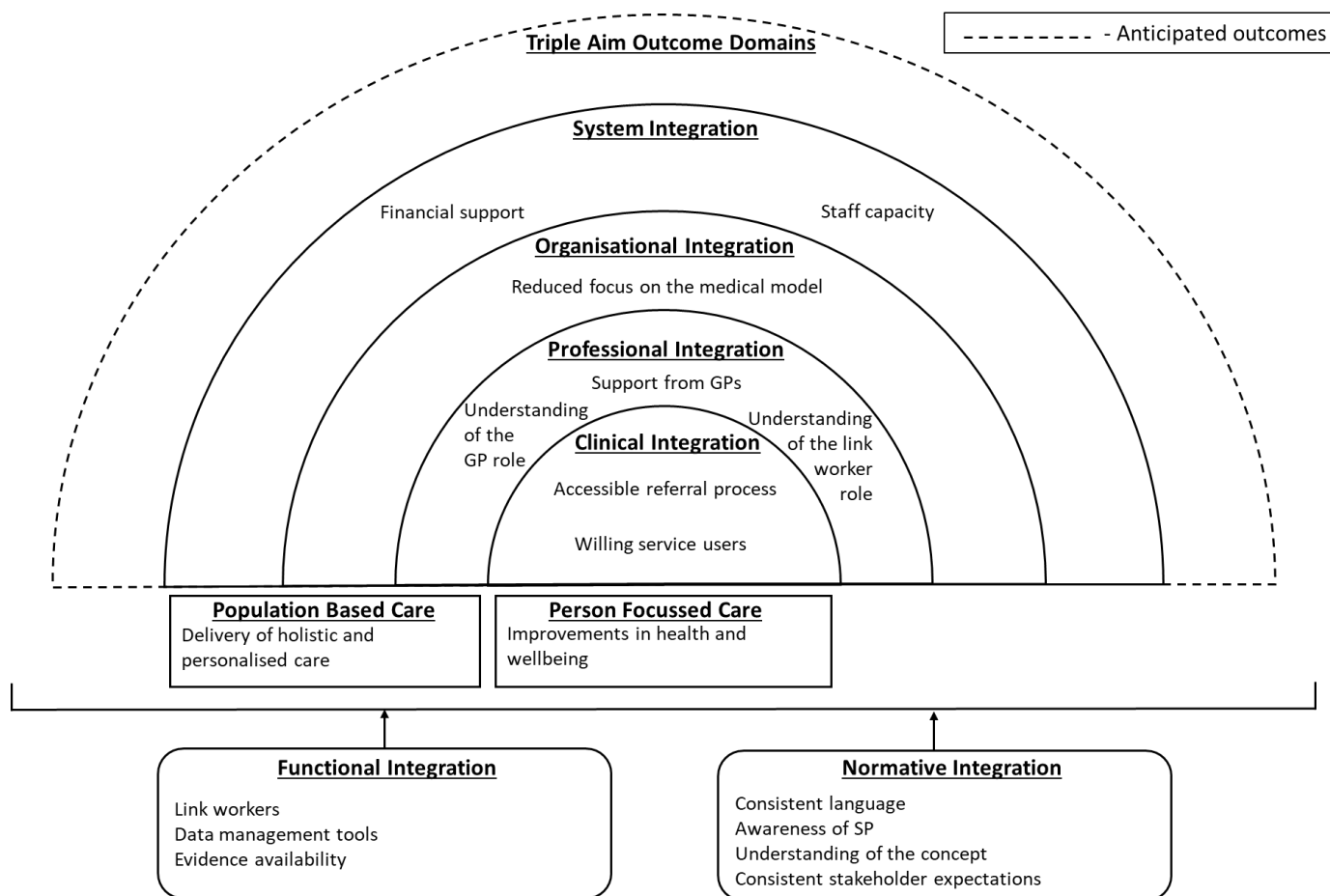


Figure 7.1: The factors identified which impact the implementation and delivery of SP in practice presented against the domains of the RMIC (Valentijn, 2016)

The RMIC presents the anticipated outcome of successful integration as the triple aim domains: experience of care, population health, and cost utilisation (Berwick et al., 2008). The triple aim domains contend that an integrated care model must demonstrate various economic, social, and patient benefits which, require co-creation and collaboration from all key stakeholders (Valentijn et al., 2016). This broadly aligns with the ethos of SP. However, the outcome of SP is challenging to both define and measure. Due to differences between organisations and service users there is no definitive example of successful SP, or what success on each of the triple aim domains would be, furthermore, the outcomes of SP were not measured in this research. Instead, the RMIC posits that the broad goal of integrated care is to achieve positive outcomes on these domains. What this looks like in practice for SP is yet to be determined. Consequently, the factors identified are thought to simply support the implementation and delivery of SP.

There are complex relationships which exist between all factors identified irrespective of the related domain of integration. These relationships are supported by the critical realist stance taken in this

research which notes the possibility of relationships between elements within a system (Mingers, 2000). The removal of one factor identified in figure 7.1 could impact the presence of other factors, and as previously discussed, if the identified factors are not present, they become barriers. For example, the financial support (system integration) available to SP services is needed to purchase data management tools (functional integration), which are required to facilitate the referral process (clinical integration). It is important to note that it is not possible to wholly identify the various factors and their relationships to one another as critical realism contends that social systems are inherently open, and, therefore, there are numerous factors which could impact a phenomenon such as SP (Mingers, 2000). However, the purpose of this research was not to accurately predict the barriers to SP and the relationships between these, but, instead, to develop a better understanding of the mechanisms involved in practice.

The complex relationships make it challenging to identify a list of factors to be 'checked off' as they cannot be seen in isolation. Furthermore, considering the differences between services in practice, the implementation process cannot be controlled, as the same process is unlikely to produce the same results in different settings. Consequently, the implementation and delivery of SP should not be perceived as a linear process, but as complex and changeable (Pescheny, 2019, Pescheny et al., 2018c). Given this, it is more valuable to consider how these factors can be addressed as a whole, rather than individual components or domains of the RMIC (Valentijn, 2016). When this is done, they can be summarised as the following five mechanisms which support the implementation and delivery of SP: a clear definition and shared understanding, supportive context, sufficient and secure funding, IT infrastructure, and stakeholder 'buy-in'. When considered at a broad level, these mechanisms suggest that SP needs to be established as a reputable intervention with formal links to healthcare. Each mechanism requires a consistent approach at a national level to facilitate both practical supports, and to improve understanding and perceptions. This, therefore, needs to be tackled from the top-down (Polley et al., 2017a, Valentijn, 2016). However, currently the evidence base is insufficient to support the wide-scale implementation of SP (Centre for Reviews and Dissemination, 2015, Rempel et al., 2017). Consequently, effort at the policy level is not justified. Despite this, without a consistent understanding of the concept, investment into data management and outcome measures, or adequate staffing, the evaluation of the concept is challenging, therefore the need for an evidence base cannot be considered independent from the other mechanisms identified. The mechanisms, alongside key features, are presented pictorially in figure 7.2 to depict their interconnectivity. The absence of one mechanism does not suggest that SP is not possible, but instead, that challenges will be experienced.

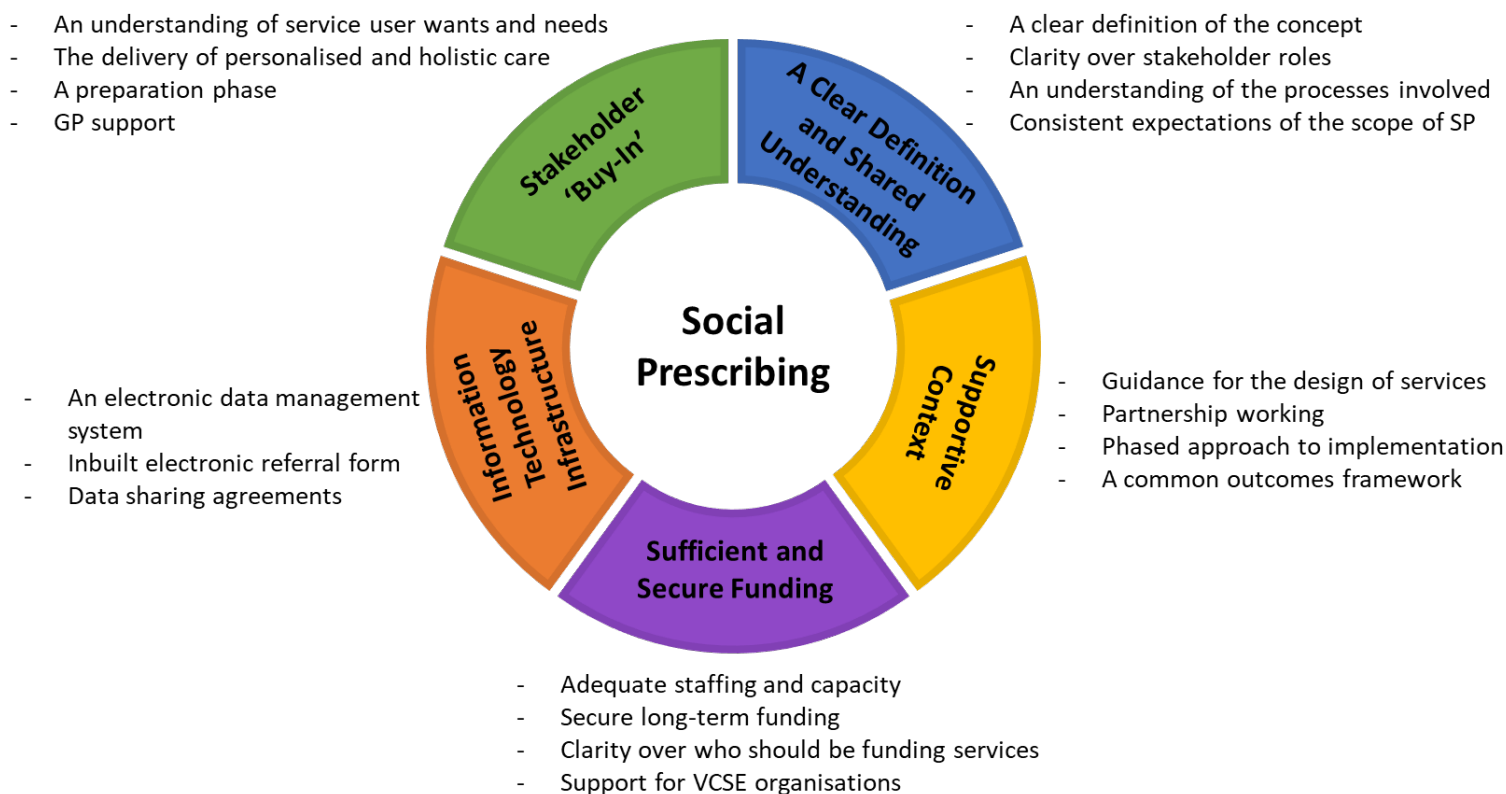


Figure 7.2: Key mechanisms which support the implementation and delivery of SP

It is important to note that many of these mechanisms largely relate to services which offer SP medium and holistic (Kimberlee, 2015a). Whilst a social prescription can be offered by a healthcare professional (SP signposting and light), this is offered during a typical consultation, and does not require wider investigation by a separate service. This type of care is already built into clinical care to address individual concerns, although it is not always termed SP in practice. Inclusion of all models in practice is important for the definition and understanding of SP, but other mechanisms, such as funding, are not relevant to these models as separate funding is not required. The focus in recent policy has been on holistic models of SP to provide person centred care to address broader issues that an individual might be facing, and to alleviate pressure on healthcare services; it has focussed on the role of link workers in providing this care (NHS England, 2014, NHS England, 2016c, NHS England, 2019c, NHS England, 2020b). This type of SP is not already embedded into healthcare, and, therefore, the implementation and delivery of this concept requires additional support. In the following sections the mechanisms which support the implementation and delivery of SP are discussed in detail, including reference to the roles of GPs and link workers in the process, before the limitations of this research are considered, and the chapter is summarised.

7.2.1 A Clear Definition and Shared Understanding

A clear definition and shared understanding of SP was identified as one of the key mechanisms to support implementation and delivery; this is displayed in figure 7.3. A clear and common definition of SP is currently lacking (Carnes et al., 2017, Polley and Dixon, 2016), and the application of the concept in practice is inconsistent (Bertotti et al., 2018, Husk et al., 2016, Woodall et al., 2018). Definitions have influence on service implementation and delivery, as individuals deliver a service which aligns with their understanding of a concept (Goodwin, 2016, WHO, 2016a). Consequently, to support consistent delivery, a shared definition and understanding of SP is required. This would allow stakeholders to articulate the mechanisms involved, and the outcomes that they are anticipating. Furthermore, this would support SP to be established as a reputable intervention, and enable the sharing of good practice between services (Polley and Dixon, 2016).

This is consistent with the normative integration level of the RMIC (Valentijn, 2016) which stresses the importance of a common frame of reference to bind together the levels of an integrated system (Fares et al., 2019, Valentijn et al., 2013). The creation of a shared understanding across organisations is thought to facilitate coherent norms and goals for practice, and therefore coherent services (Suter et al., 2009).

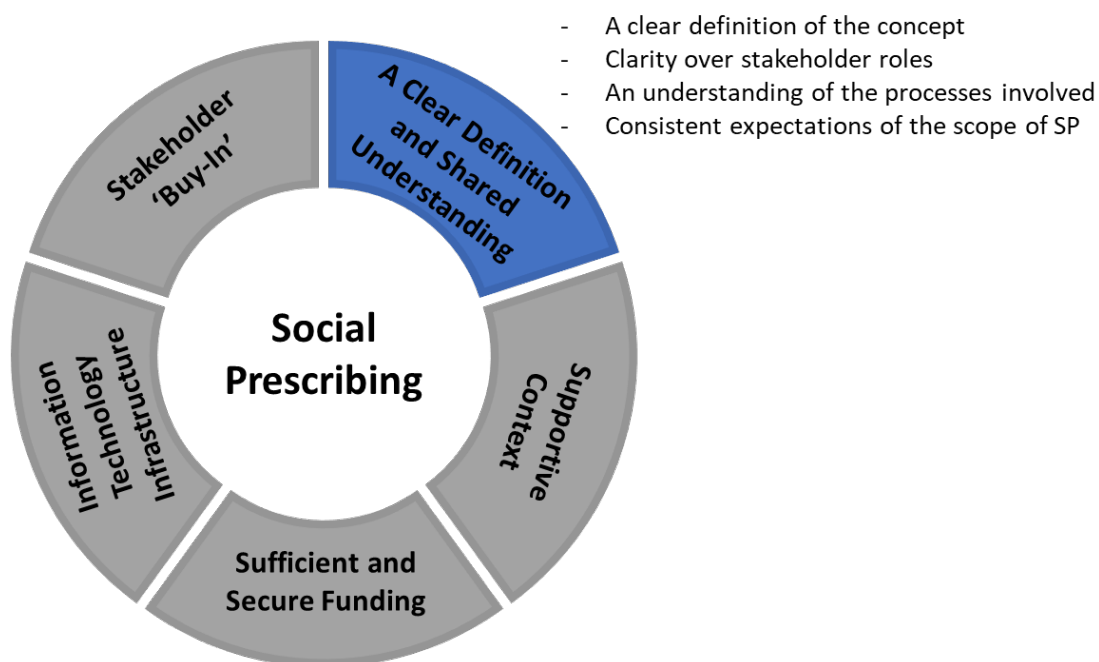


Figure 7.3: Key mechanisms which support the implementation and delivery of SP (a clear definition and shared understanding)

SP relies on individuals being actively engaged in their care. However, without an understanding of the healthcare concept, individuals are less able to engage (Graham and Brookey, 2008). Research has shown that patient satisfaction, adherence to treatment, and perceived outcomes are improved

when the healthcare professional and patient have a shared understanding of the care being provided (Bombard et al., 2018, Kennedy et al., 2017). Thus, if the concept is understood by healthcare professionals, and there is a clear definition available, they can in-turn support their patients to understand, and this is likely to lead to increased engagement and improved outcomes. This aligns with the clinical integration level of the RMIC (Valentijn, 2016) which contends that the provision of clear and understandable information from healthcare professionals (e.g., a GP) to those accessing care, is required for successful integrated care (Valentijn et al., 2015).

Study II investigated the language surrounding SP (objective 4). Consideration of the literature and the findings from study II led to the development of a new definition of SP which is displayed in figure 7.4. This new definition differs from those pre-existing in the following ways:

- The definition more tightly applies the term to the point at which the social prescription is performed.
- The term 'healthcare professionals' is adopted rather than focussing on GPs.
- Both healthcare professionals and link workers are identified as providing social prescriptions.
- The anticipated outcome of the social prescription is included.
- Those accessing SP are labelled 'individuals' rather than 'patients' or 'service users'.
- The importance of community resources is highlighted.

SP is a process by which a healthcare professional or SP link worker assesses an individuals' non-medical needs and connects them with non-medical sources of support, often within the community, to improve health and wellbeing.

Figure 7.4: The proposed definition of SP

In the subsequent sections the identified processes involved in SP are presented before the roles of both GPs and link workers within the concept are considered. Following this, the clinical connotations of the term and language used within SP are discussed, and finally, the need for shared understanding and expectations of the scope of SP is reviewed.

7.2.1.1 Processes in Social Prescribing

It is evident from the literature and the current research (figure 6.11) that the SP 'journey' varies between services based on factors such as service user goals, referral route, and the support received (Bhardwa, 2015, Blickem et al., 2013, Cawston, 2011, Duffin, 2016, Fisher, 2014, Kilgarrieff-Foster and O'Cathain, 2015, Maughan et al., 2016, Morton et al., 2015, Randall, 2015). However, the core principle remains consistent, which is to assess individuals' non-medical needs and refer them

to appropriate support. To be applicable to all models of SP in practice, the definition needs to be tightly applied to this core principle so, irrespective of these wider differences between services, SP can always be identified and communicated in policy, practice, and research. This would facilitate consistent delivery and support the concept being established as a reputable intervention.

Consideration of the literature and the findings from this research lead to the identification of the fundamental processes involved in SP in practice; these are displayed in figure 7.5. This figure highlights that the model of SP implemented makes only a slight difference to the processes surrounding SP. The point at which the social prescription occurs is consistent, although who is providing this prescription differs.

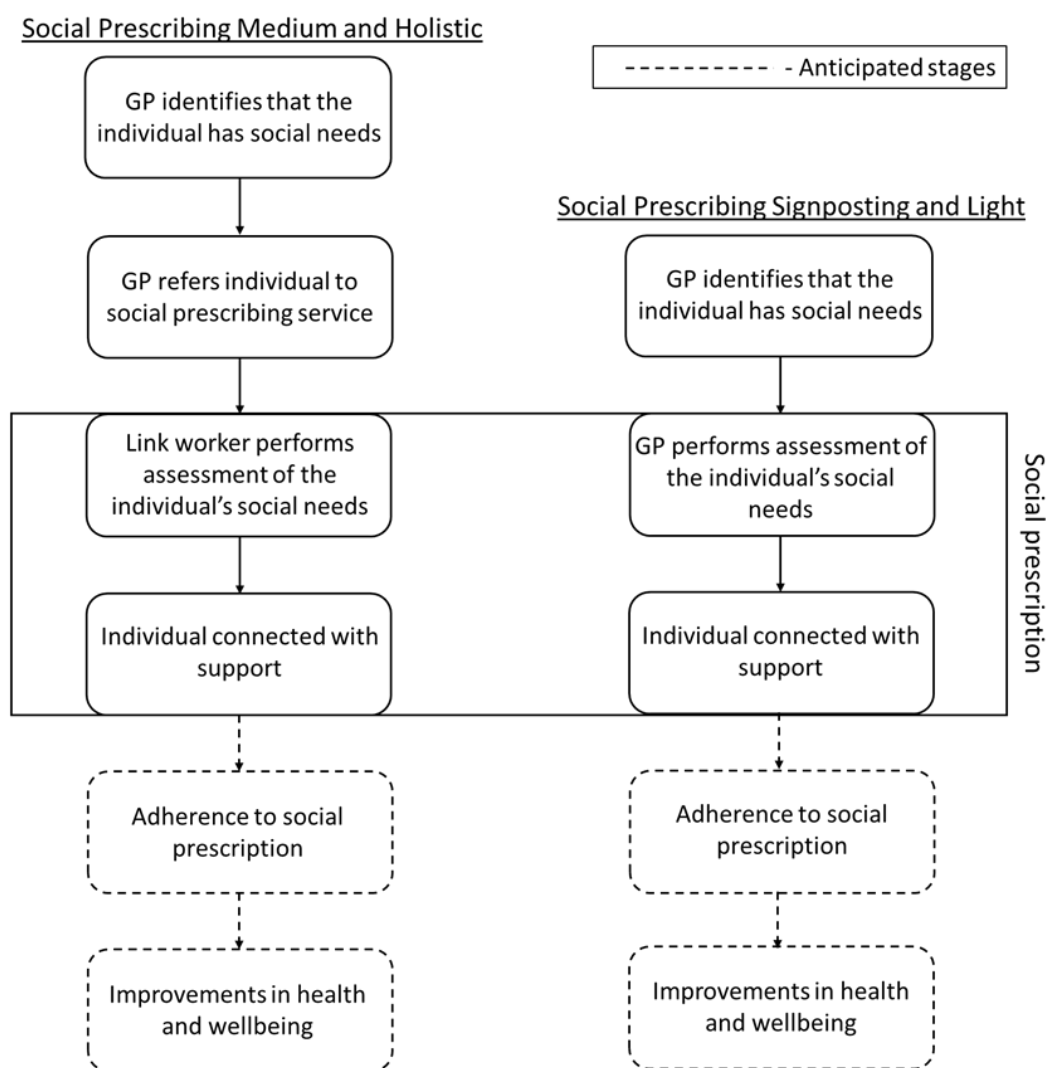


Figure 7.5: The fundamental stages surrounding SP dependant on the model implemented

In SP holistic and medium, the GP identifies that an individual would benefit from non-medical support, but instead of identifying this support themselves, they refer them to a SP service for investigation. After this, the social prescription occurs, during which the link worker assesses the

individual's social needs and connects them with support. Next, it is assumed that the individual adheres to the support offered and, therefore, experiences improvements in health and wellbeing. SP light and signposting differ in the fact that, instead of the GP referring the individual to a SP service, the GP offers the social prescription.

Many current definitions of SP encompass multiple components of figure 7.5. For example, some definitions do not differentiate between the act of directly referring service users to social activities, a referral to a SP service, or the journey which the service user takes as they carry out their prescription (Bertotti et al., 2018, Husk et al., 2019, Pilkington et al., 2017a, Skivington et al., 2018b, Wildman et al., 2019b). This lack of specificity leads to confusion as to when the social prescription occurs. For example the following definition was developed by the SPN: *"Enabling healthcare professionals to refer patients to a link worker, to co-design a non-medical social prescription to improve their health and wellbeing"* (Polley and Dixon, 2016: 19). Whilst this is commonly cited (Bertotti et al., 2018, Polley et al., 2017b, Torjesen, 2016), it does not differentiate between the healthcare professional making a referral and the assessment by the link worker, and therefore does not provide clarity on the point at which the social prescription occurs. Moreover, it does not account for social prescriptions carried out by GPs without the use of a SP service, such as SP light (Kimberlee, 2015a).

Since completion of data collection, the NHS has released the following definition of SP: *"SP enables all local agencies to refer people to a 'SP link worker' to connect them into community-based support"* (NHS England, 2019e: 1). Like other definitions, this encompasses multiple stages of the SP process, and does not refer to SP light and signposting. Conversely, the definition of SP offered in the More Than Medicine report (Langford et al., 2013: 7) does include SP light and signposting, however, it excludes that of the link worker in SP medium and holistic: *"clear, coherent and collaborative process in which healthcare practitioners work with patients and service users to select and make referrals to community based services"*. Consequently, the definition in figure 7.4 more closely represents SP in practice as it is relevant to all models.

The lack of specificity provided by pre-existing definitions of SP is further highlighted by Mann et al (2017), who explained that the term 'SP' is used to refer to either the process of healthcare professionals (e.g., a GP) prescribing time with a link worker, or both the process of prescribing a link worker and the subsequent community group/activity that is recommended to the service user. In consideration of the all-encompassing nature of the existing definitions of SP, Kimberlee's (2015a) separation of SP into four smaller concepts seems relevant: signposting and SP light, medium, and holistic. However, still there is no separation between the healthcare professional

making a referral to a SP service, the act of the link worker performing an assessment, and the subsequent support (e.g., walking groups or financial advice), and, therefore, the point at which the social prescription occurs is still unclear. Instead of employing 'SP' to encompass the entire patient 'journey' from primary care to improved health outcomes, the term should be more tightly bound to a single act, as in the definition offered in figure 7.4. This would support the proper articulation of the mechanisms involved in practice.

Prior to a medical prescription being given, a full assessment of the recipient, including a thorough history, must be undertaken (General Medical Council, 2013, Nursing and Midwifery Council, 2018, The Society of Radiographers, 2018). Whilst SP is not akin to medical prescribing, an assessment of an individual's needs is necessary to identify the best course of action. Link workers interviewed considered the social prescription to be the point at which a full assessment of the service user's social needs is carried out and the appropriate social support is identified. Thus, when the different levels of SP introduced by Kimberlee (2015a) are considered, it can be established that both GPs and link workers are delivering social prescriptions, but at different levels of SP. For example, in SP light, when a GP refers a service user directly to a non-medical provision within healthcare, the GP has performed an assessment of the service user's needs and constructed an appropriate prescription. However, in SP medium and holistic, the GP simply makes a referral to a SP service, and the link worker then performs a detailed assessment of the service user's social needs. In this instance, whilst the GP has assessed the service user and identified that they require support for their social needs, they have referred the service user to another source to identify what social support might be appropriate.

Instead of being included under the umbrella term 'SP', the act of a GP referring a service user to a SP service, should simply be termed a 'referral'. 'Refer' is defined as *"to direct someone or something to a different place or person for information, help, or action"* (Cambridge Dictionary, 2018b). Referrals are typically employed in healthcare to direct service users to an 'expert' in a particular area. It has been found that GPs support the use of the term 'referral' to denote the transfer of patients to SP services (Royal Society for Public Health, 2019). They suggest that this signifies the end of their responsibility in terms of the management of the individual's care, similar to medical referrals (Scottish Development Centre for Mental Health, 2007); this alleviates some of the concerns raised by GPs interviewed relating to their responsibility for the referred individual. This language has also been adopted in the recent guidance published for healthcare professionals (Royal Society for Public Health, 2019).

The use of the term 'referral' to describe the transfer of service users from primary care to SP services is reflected in the definition of SP offered in *A Connected Society* (HM Government, 2018). Although the separation of the social prescription and the referral is not specifically affirmed, they describe the role of link workers as to take referrals from local agencies (including GPs) (HM Government, 2018), therefore supporting the position of the current research. Furthermore, the stages surrounding SP presented in figure 7.5 are supported by the *Making Sense of SP* guide (University of Westminster, 2017). In this, the authors note that SP in practice had three key components: 1) referral from a healthcare professional, 2) consultation with a link worker, and 3) agreed referral to a local VCSE organisation. The guide contends that these three areas make up the social prescription. However, this research separates the act of a healthcare professional making a referral from the act of SP to apply the concept more tightly. Also, this separation ensures the definition proposed is reflective of all models of SP in practice, as the components presented by the *Making Sense of SP* guide (University of Westminster, 2017) fail to include SP light and signposting. Accordingly, the definition of SP proposed in figure 7.4 incorporates this new, more specific, understanding of SP.

The new definition proposed focusses on the action of connecting service users with sources of support, a focus which is reflected in other definitions of SP (Chatterjee et al., 2018b, Panagioti et al., 2018, Skivington et al., 2018b). This connection can be as simple as a GP giving a patient a leaflet for a supportive service, to as complex as a link worker attending a social support service with a service user. However, the core act of connecting the service user with support remains consistent irrespective of the support provided.

Some definitions make reference to community resources relied upon in SP (Davey, 2018, Morton et al., 2015, Rempel et al., 2017, Torjesen, 2016), however some do not (Polley and Dixon, 2016); consequently omitting the important contribution of the VCSE sectors. The various support options referenced in both the data sets accessed (study I) and the stakeholder interviews (study II) are displayed in figures 5.6 and 6.12. Whilst some organisations were located within healthcare (e.g., stop smoking services), most were based within the local community, such as social groups, leisure centres, and libraries. Although not all models of SP focus on services in the local community, SP light for example (Kimberlee, 2015a), most do incorporate them into their delivery, and, therefore, it is important that this is reflected in the definition of the concept. The new definition proposed incorporated the phrase 'often in the community' to note the importance of community resources in most models of SP.

Many pre-existing definitions do not refer to the goal of SP, something which is vital to the understanding of the concept. The inclusion of this in the definition will better support stakeholders to communicate the anticipated outcomes of SP. Study II highlighted the importance of SP for addressing the wider determinants of health to prevent, or mitigate against, poor clinical outcomes. This was supported by the investigation of the service user data in study I which showed the varying reasons for referral to SP services. Due to the differing reasons for referral, and differences between service user goals, it is challenging to accommodate anticipated outcomes in a concise definition. A review of the literature relating to SP was conducted to establish the aims of such services (Rempel et al., 2017). The most common aim reported was 'improved mental well-being', with 25 out of 41 studies citing this as their core aim. Physical wellbeing and social wellbeing were also frequently mentioned, with 16 and 21 citations, respectively. Some pre-existing definitions have utilised the phrase 'to improve health and wellbeing' to represent the aim of SP (Bertotti et al., 2018, Mann et al., 2017, Polley and Dixon, 2016). This is consistent with the broad understanding of SP in practice established in the current and previous research, and should, therefore, be included in the definition.

7.2.1.2 Roles in Social Prescribing

After consideration of the findings from study II and the existing literature, the following key roles of stakeholders in SP were identified:

- The GP is a 'gatekeeper' in all models of SP.
- The GP refers individuals to SP services.
- Both the GP and link workers assess an individuals' social needs and connect them with appropriate support, therefore proving social prescriptions, however they should not be named 'prescribers' in the context of SP.
- Link workers have a valuable role in the provision of ongoing personalised support.

Figure 7.5 accentuated that, irrespective of the model of SP implemented, the GP remains the first point of contact (Kimberlee, 2015a). General practice is the 'entry point' into healthcare (Gervas et al., 1994), it is typically the first place individuals visit when they experience a health issue, whether physical, mental, or social, (Cawston, 2011, NHS England, 2016b). Due to this, GPs are the 'gatekeepers' to many healthcare services (Forrest, 2003, Greenfield et al., 2016, Groenewegen, 2016, Loudon, 2008, Wammes et al., 2014, Willems, 2001). This research identified that this was also the case for SP. Most service users interviewed received their SP referral from their GP, and all link workers interviewed noted that they received referrals from general practice.

Link workers considered the inclusion of primary care in the SP process to be positive as it promoted joined-up healthcare and gave SP a level of authority which is not typically afforded to services in the VCSE sector. Although this view was not investigated with service users in this study, it is in-line with existing research which has found that, due to patients' trust in GPs' advice, acceptance of practitioners' recommendations is promoted, and adherence to health-related interventions is improved (DiMatteo et al., 2002, Martin et al., 2005, Pescheny et al., 2018a). In study II some instances of self-referral to SP services were identified, however not all services accepted self-referrals, and, therefore, this was uncommon. Furthermore, whilst this research focussed on GPs, and therefore they are represented in figure 7.5, it was noted in interviews that a variety of healthcare professionals could refer to SP services, such as pharmacists and nurses. Consequently, instead of focussing on GPs, the new definition proposed uses the term 'healthcare professionals' to ensure a wider range of referral routes are included. Few existing definitions use this encompassing term (Morton et al., 2015, Polley and Dixon, 2016, University of Westminster, 2017), instead most focus on GPs (Brandling and House, 2009, Stickley and Eades, 2013, Vogelpoel and Jarrold, 2014). Future research should incorporate a wider range of healthcare professionals in their investigation of SP as their experience may differ from those of GPs.

It was identified that, processes surrounding SP differ dependant on the model implemented, however the core actions of providing a social prescription remain consistent between models, the only factor that differs is that of who is carrying out these actions. Link workers interviewed considered their role in the assessment of service users to be important in the SP process. They referred to the amount of time they spend with service users and explained how this allowed them to understand their needs and identify appropriate support. This was corroborated by service users who often referred to the amount of time link workers spent with them and the level of detail of their questions. Some link workers argued that a social prescription cannot be delivered until the service user's issue is fully understood, and this cannot be achieved before a full assessment of the service user is completed, which is their role. However, link workers are not involved in SP signposting and light, therefore in these models it is the GP who performs the assessment of the service user's needs and identifies appropriate support. Consequently, both healthcare professionals and link workers provide social prescriptions.

The clinical connotations of the term 'SP' are discussed in section 7.2.1.3, however this research also identified wider issues with the use of the term 'prescribing'. Some link workers interviewed were anxious to define themselves as 'prescribers' given their role in assessment (Kimberlee, 2015a). This interpretation aligns with the traditional understanding of prescribing as, before a medical prescription can be given, a full assessment of the recipient, including a thorough history, must be

undertaken (General Medical Council, 2013, Nursing and Midwifery Council, 2018, The Society of Radiographers, 2018). However, social prescriptions are not medical, and the type of assessment performed is, therefore, different. Thus, it is surprising that some link workers were anxious to define themselves using terminology reminiscent of the medical model. Moreover, the basic definition of prescribe is “to tell someone what they must have or do, or to make a rule of something” (Cambridge Dictionary, 2018a). This is in juxtaposition to SP in which link workers and healthcare professionals work with individuals to identify appropriate support. The fact that link workers ascribed clinical terminology to their non-clinical role highlights the dominance of the medical model within healthcare, and the lack of clarity of the link worker role in SP. As SP focuses on social options and is implemented to support a shift in healthcare away from the medical model (NHS England, 2014, University of Westminster, 2017), then the labelling of link workers as prescribers is counterintuitive. Also, as the term ‘prescriber’ has connotations of treatment being enforced, and this does not align with the link worker role, the use of the term could, therefore, lead to misconceptions about the work that the link workers do.

The role of a link worker is new, the boundaries are yet to be fully established and their position is tentative. It is not, therefore, surprising that link workers are keen to affirm their position by affixing the traditionally clinical action of prescribing to their role; also, by highlighting themselves as key stakeholders in the SP process. GPs interviewed did not consider where the onus of the prescription lay during SP. Perhaps this is due to their position in healthcare being well established. The views of link workers interviewed highlights the need for SP to be established as a reputable intervention with formal links to healthcare, as this would affirm, and secure, link workers’ position outside of the medical model. Formal training or qualifications would further strengthen and standardise the link worker role. Recent policy reports that the personal qualities and life experience of link workers, such as empathy and listening skills, are favoured above formal training due to the nature of the role (NHS England, 2020b). One job description states that link workers should be working towards an NVQ level 3 (NHS England, 2020b), however there is no common formal training for link workers. The need for link workers to undertake accredited training has been noted (NHS England, 2020b). However, whilst some training can be found online (Bromley by Bow et al., 2020, Certa, 2019, DNA Insight, 2019, NWPHPN, 2019), the NHS has not yet released a mandatory accredited qualification for all link workers. Formal qualifications or training for link workers may increase the reputation of the role and prevent link workers from justifying their position using clinical terminology (e.g., prescriber). For the purposes of developing a definition and understanding the process of SP, no stakeholder needs to be termed the ‘prescriber’. Instead, the focus is on the actions performed, and who is delivering these actions. Consequently, both GPs and link workers can deliver a social

prescription, but they should not be termed 'prescribers' in the context of SP due to the discussed connotations of this term.

Whilst the core actions of providing a social prescription remain consistent between both GPs and link workers, study II displayed that the way in which these actions are performed varies between the two groups. For example:

- Link workers have a greater amount of time to perform the assessment for service users' social needs, sometimes they spend multiple hours doing so.
- Link workers have a good knowledge of local support services available, as this is their primary focus, sometimes this includes access to a database of such support.
- Link workers often follow-up with service users to discuss their experiences of the social support offered, and they are available for service users to contact about this support.
- Link workers can support individuals in accessing support, for example attending services with the individual.

Due to these differences, link workers are best placed to provide social prescriptions, largely owing to their increased capacity and their knowledge of supportive services. This was supported by GPs interviewed who argued that, due to a lack of time during the appointment, and a predisposition to clinical issues, they may not address social issues. Instead, another professional (e.g., a link worker) would do a better job of addressing non-medical needs. Whilst service users interviewed in this research did not discuss such issues, previous research has found that difficulties are experienced when discussing non-medical needs with GPs (Butalid et al., 2014, Popay et al., 2007b). It has been found that GPs find it challenging and time-consuming to deal with their patients' non-medical issues, and, therefore, may be reluctant to probe for these (Brandling and House, 2009, Butalid et al., 2014, Ferguson and Hogarth, 2018, Kilgore et al., 2008, Popay et al., 2007b). Furthermore, whilst both GPs and link workers can provide social prescriptions, it is recognised that simply connecting individuals with supportive services (e.g., SP signposting and light) can result in low uptake, and, therefore, involving a link worker to provide personal support and guidance is likely to increase adherence (Brandling and House, 2009, Pescheny et al., 2018a). These findings, combined with the current research, suggest that link workers have an important role within primary care to support the identification and response to the non-medical needs of service users.

Many definitions focus on the role of healthcare professionals in SP (Cawston, 2011, Gottlieb et al., 2018, Langford et al., 2013, Pescheny et al., 2018c), which is surprising considering the principal role that link workers were found to perform in SP (Lovell et al., 2017, Mossabir et al., 2015, Pescheny et al., 2018a, Price et al., 2017, Wildman et al., 2019b). Research reports that the most favoured model

of SP involves the use of a link worker to act as a bridge between primary care and the VCSE sectors (Brandling and House, 2009, Friedli and Watson, 2004, Grayer et al., 2008, South et al., 2008). Moreover, evidence from Grant et al (2000) suggests that SP without the use of a link worker is less effective in relation to service user outcomes. This is perhaps explained by research which identified link workers as key enablers of behaviour change (Bertotti et al., 2018, Moffatt et al., 2017). Service users in the current research valued the ongoing and personalised support provided by the link worker. They reported that the continuity of care made them feel comfortable asking for further support and encouraged them to participate in the social interventions they were linked with. This is supported by research which has found that link worker's person-centred approach facilitates the uptake and adherence to SP (Killingback et al., 2017, Moffatt et al., 2017, Pescheny et al., 2018a). Consequently, holistic SP, and specifically link workers are important for the delivery of person-centred care (Dayson, 2017), therefore supporting population based care (Valentijn et al., 2015); Link workers are also an example of functional integration as they support the delivery of SP (Valentijn et al., 2015).

7.2.1.3 Clinical Connotations of the Term

Due to differences in what is accessed between a social prescription and a medical referral, questions were raised by participants about the appropriateness of the term prescription to describe a non-medical, and non-enforced element of care. Both GPs and link workers interviewed expressed concerns that the use of clinical terminology, such as 'prescription', could lead to assumptions about the option, and perhaps confusion when expectations of a medical referral are not met. When GPs discussed their experiences of providing a social prescription without the use of a SP service, they described it as being in an informal sense, more consistent with advice than a traditional prescription. The definition of the term 'prescribe' in the Cambridge dictionary is: "*(of a doctor) to say what medical treatment someone should have*" (Cambridge Dictionary, 2018a). This is contradictory to SP in which the service user plays an active role in the decision process. Instead of a social prescription being enforced, the service user works with the link worker or GP to discover the best course of action. Consequently, GPs and link workers interviewed did not think that the clinical term 'prescription' was reflective of SP in practice. This notion is supported by interviews conducted by the NHS and Health Education England; in these, respondents identified the term 'SP' as problematic because it does not imply that services work with service users, instead it suggests that things are done to, or for them (NHS and England, 2016). Therefore, the terminology does not create a sense of increased patient empowerment or autonomy, which is an essential element of SP.

GPs interviewed stated that they did not use the term 'SP' with service users. This was corroborated by service users, all of whom declared that they had not previously heard the term. Both GPs and

link workers rationalised that service users did not need to be aware of the terminology, only of the service that will provide them with support. Arguing that, by only referring to the supporting service, rather than terming it a social prescription, they were avoiding confusing service users with multiple terms. Both groups also maintained that the use of a clinical term (prescription) to describe a non-medical referral may perpetuate the service user's understanding that their issue is medical, and, therefore, requires attention from a medical professional, consequently they avoided using such a term. The findings of the current study are supported by focus group sessions run during the Annual SPN Conference (2016), during which respondents argued that service users do not necessarily need an established definition of SP, or an understanding of the concept, as long as they receive support from the referred to organisation. However, link workers in the current study raised concerns about the disparity between service user expectations and the reality of SP. Having a clear understanding of the concept of SP, and a consistent term and definition in use in healthcare, may alleviate some of the issues relating to this.

GPs and link workers considered the correct use of the term to be of particular importance in situations involving commissioners and funders of SP services, to ensure consistent expectations. Link workers also argued the importance of the word 'prescription' for use in professional situations, as this is a concept familiar to GPs, which may mean the concept holds authority with them, increasing the likelihood of use. However, GPs viewed the use of clinical terminology to describe a social concept negatively, arguing that a social and medical prescription are vastly different concepts, and this may become confusing for both GPs and service users. The term 'prescription' is not ideal to describe SP due to the clinical connotations, however it is already widely utilised in policy, practice, and research (Polley and Dixon, 2016). When asked if they could think of a more appropriate term for the concept, GPs interviewed in the current research could not. This research has focussed on developing a clear and concise definition of the concept to support the proper articulation of the mechanisms and outcomes involved in SP. Future investigation is required to develop a more suitable name for the concept of SP.

The term 'prescribing' is not the only example of clinical terminology used in SP. Numerous definitions employ the term 'patient', which is traditionally associated with healthcare, to describe those accessing services (Alderwick et al., 2018, Bertotti et al., 2018, Skivington et al., 2018a). It is not surprising that this term is used, as many definitions focus on the role of primary care in SP (Carnes et al., 2017, Gottlieb et al., 2018, Whitelaw et al., 2017). However, there are varying models of SP in practice (Kimberlee, 2015a) and not all services are positioned in healthcare, thus it is not appropriate for those accessing such services to be referred to with terminology traditionally employed in medical care. Instead, the term 'service user' is used in some definitions (Langford et

al., 2013, Loftus et al., 2017, Mann et al., 2017, Vogelpoel and Jarrold, 2014). This more accurately represents those accessing services, especially those which are positioned in the VCSE sectors. However, research has found that, in medical settings the term 'service user' is disliked by the group it describes (Simmons et al., 2010). Moreover, whilst this term is useful to determine group identity (e.g., in this research) (Beresford, 2005), it is argued that it contradicts person-centred care as it ascribes meaning through the prism of a single aspect of an individual's life, and, therefore, neglects their additional multiple socially constructed identities (McLaughlin, 2008, Wallett, 2016). This is contradictory to the person-centred approach adopted within SP which aims to tailor care to individuals. Moreover, the term service user restricts identity to the status of being dependant on a service. No research has investigated the preferred term for those accessing SP services, however in other areas of care, the phrase 'individuals who use the service' is preferred (Wallett, 2016). To align with the personalised and non-medical nature of SP, both terms 'patient' and 'service user' should not be present in the definition, instead the term 'individual' is proposed.

7.2.1.4 Consistent Understanding and Expectations of the Scope of Social Prescribing
GPs interviewed argued that a lack of awareness of SP, and a lack of understanding of the processes involved, deterred them from proposing such options. They maintained that they are unable to feel confident offering treatment that they are insufficiently educated and trained in. This is evident in the few and inappropriate referrals received by some SP services from primary care identified in this, and other research (HM Government, 2018, Laing et al., 2017, Mossabir et al., 2015, Royal College of General Practitioners, 2018a). Link workers interviewed hypothesised that these referrals were due to GPs misunderstanding what SP could offer.

GPs confirmed that they did not study SP during their training, and have not had training on this since, although some noted that they did study concepts relating to it, such as the SDH (Dahlgren and Whitehead, 1991). Recently, the need for increased training on the SDH for healthcare professionals has been highlighted (Royal Society for Public Health, 2019, Santoni et al., 2019). SP is not currently part of the core curriculum for undergraduate or postgraduate medicine students (Giurca, 2018, Lee and Sundar, 2018). Yet outcomes for graduates published by the General Medical Council emphasise the need to apply social principles to care, as well as patient empowerment, health promotion, and shared decision-making (General Medical Council, 2018), all of which relate to SP. Many UK based medical schools have expressed a desire to integrate SP into their curriculums (Giurca, 2018). To address this, The College of Medicine, NHS England, and the SPN collaborated to develop the National SP Student Champion Scheme. This scheme delivers informal peer-assisted teaching sessions on SP across medical schools in England (Giurca, 2018). It is thought that this will

increase understanding and awareness of SP, and, therefore, increase usage once medical students are qualified.

If the current drive for SP at the policy level is continued (NHS England, 2014, NHS England, 2016c, NHS England, 2019c), SP needs to be a formal part of medical education rather than taught as an additional scheme to support the concept in practice. Furthermore, placements during training with non-medical, or VCSE organisations, such as SP services, would support students to have a comprehensive understanding of SP's position in healthcare and the value of the VCSE sectors. However, this, and initiatives such as the Student Champion Scheme, would only target those who are in medical school. Training to educate those who are already in practice is also required.

Link workers interviewed were frustrated about a mismatch of expectations between those running the SP service, and those funding it; they argued that this had implications for the way the service was run. This was due to funders not having a clear understanding of the type of service they are funding and having their own outcome agenda which may not align with the values of the service or the mechanisms of SP in practice. This highlights the need for a clear and common understanding of the concept. The use of the definition and understanding of SP presented in this chapter would support communication between stakeholders. GPs and link workers considered the correct use of the term to be of particular importance in situations involving commissioners and funders of SP services, to ensure consistent expectations and the articulation of the outcomes that they are anticipating.

Both GPs and link workers interviewed agreed that service users were often apprehensive of SP. They stated that this was due to the unknown nature of such a referral. All service users interviewed noted that they had not heard of the term 'SP', and many reported that they were unsure of what a social prescription would entail when they were referred. Link workers suggested that this was due to GPs inadequately explaining what SP was when they made the referral. Because of this, link workers reported that service users often had expectations which did not match with what SP was able to provide. This caused some to disengage, thus contributing to the engagement issue experienced by some services (Brandling et al., 2011, Grant et al., 2000, Grayer et al., 2008, Loftus et al., 2017, Lovell et al., 2017, Mossabir et al., 2015, White et al., 2010). This research did not investigate issues with engagement, however other studies have concluded that a lack of understanding at the point of referral creates a barrier not just to initial uptake but also continued engagement (Brandling et al., 2011, Friedli et al., 2012, Whitelaw et al., 2017). It has been found that engagement and perceived outcomes are improved when the healthcare professional and patient have a shared understanding of the care being provided (Bombard et al., 2018, Graham and

Brookey, 2008, Kennedy et al., 2017). This also aligns with the clinical integration level of the RMIC (Valentijn, 2016) which contends that, the provision of clear and understandable information from healthcare professionals (e.g., a GP) to those accessing care is required for successful integrated care (Valentijn et al., 2015). However, in both this, and previous research, service users reported difficulties in discussing non-medical needs and treatment options with GPs (Butalid et al., 2014, Popay et al., 2007b); GPs interviewed contended that this was due to time constraints. The definition proposed in figure 7.4 could be used in practice to support GPs in communicating the concept of SP with their patients in a timely manner, and, therefore, improve service user understanding.

It is likely that patients' expectations are influenced by the traditional biomedical model of healthcare (Pescheny, 2019). In fact, research found that service users' expectation to be referred to a medical service created a barrier to uptake (Friedli et al., 2012, Pescheny, 2019, Whitelaw et al., 2017). Whilst there has been an increased focus on the concepts of person-centred and holistic care (Farre and Rapley, 2017), especially in policy documents (NHS England, 2014), the uptake and implementation of it in practice has been slow (Edozien, 2015). Findings suggest that increased service user understanding and acceptance of social options in healthcare is required. Without this, despite engagement from healthcare policymakers and practitioners, non-uptake from patients could create a significant barrier to the implementation of SP. This is supported by Smith (2002) who stated that the biopsychosocial revolution may be hindered if patients did not understand this type of care. An increase in education on SP and the wider determinants of health should increase GP awareness and use of such services in primary care, and, in turn, increase patient awareness of non-medical options. It will also enable healthcare professionals to detail the option to service users, in-turn reducing apprehension and unrealistic expectations.

7.2.2 Supportive Context

Critical realism stresses the importance of understanding contextual factors in knowledge generation (Zachariadis et al., 2013). Consistent with this, the supportive context was identified as a key mechanism to facilitate the implementation and delivery of SP; this is displayed in figure 7.6. There is limited practical support for SP (Dayson, 2017), specifically for the design and delivery of services. Thus, this research contends that, before SP can be established as a reputable intervention and formally linked with healthcare, further guidance for practice is required. This guidance is needed at the policy level. However, whilst some research presents positive findings of SP (Dayson et al., 2013, Grant et al., 2000, Grayer et al., 2008, Kimberlee et al., 2014a, Mossabir et al., 2015), there is a dearth of good quality evidence to support the wide-scale implementation of the concept (Fancourt et al., 2019a, Husk et al., 2019, Price et al., 2017). Therefore, effort at the policy level is not justified. However, without many of the factors identified in this research, such as a consistent understanding of the concept, investment into data management, or adequate staffing, the evaluation of services is challenging, therefore the need for an evidence base cannot be considered independent from the other mechanisms identified. To tackle the need for further evidence to justify the wide-scale implementation of SP, a phased approach to national implementation is recommended. This could be facilitated through the creation of test sites. In these, the mechanisms presented in figure 7.2 could be addressed, and the services evaluated to develop the evidence base, and determine whether SP should be implemented at a national level.

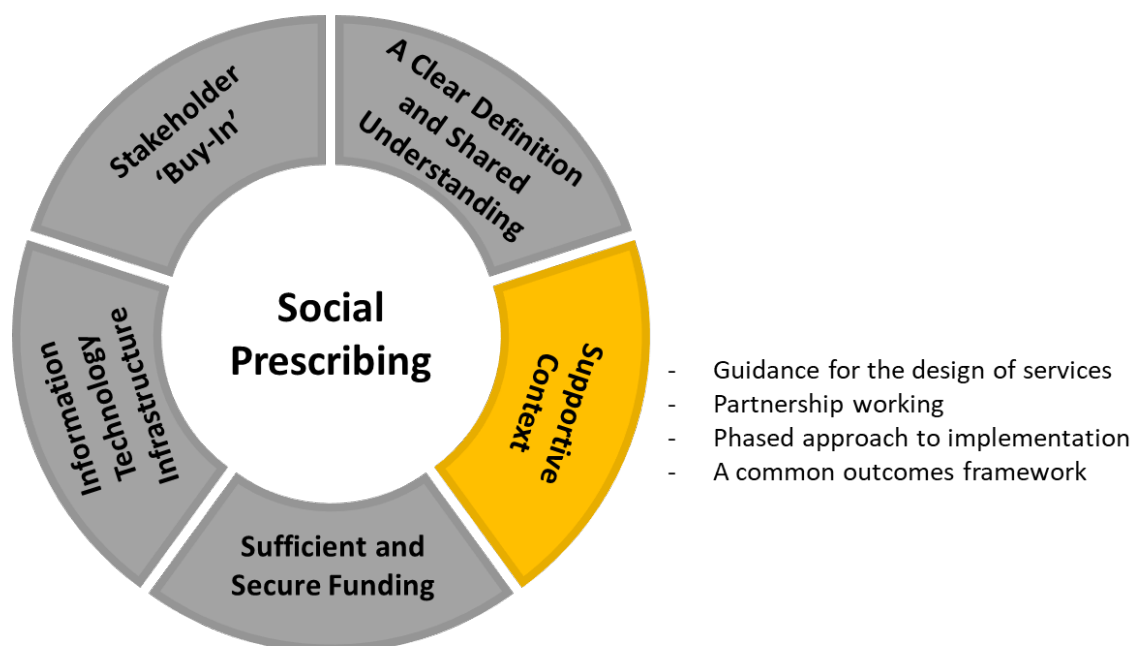


Figure 7.6: Key mechanisms which support the implementation and delivery of SP (supportive context)

7.2.2.1 Supportive Policy

Interventions such as SP are passed down from policy to practice, and, whilst much policy and initiatives create a supportive climate for the development of SP services (Marmot et al., 2010, NHS England, 2014), and set out a vision for the future of the NHS focussing on new models of care (NHS England, 2014, NHS England, 2016c, NHS England, 2019c), there is limited practical support for its implementation (Dayson, 2017). As a result, the concept has developed from the bottom-up (Polley et al., 2017a, Valentijn, 2016). A clear and concise definition of SP (figure 7.4) is important for understanding and to facilitate communication between stakeholders, but it alone is insufficient to support the design of services. Detail is required on how services should be designed and the responsibilities of stakeholders. This information will standardise services across localities, therefore supporting a common understanding, and enabling the sharing of outcomes and best practice. Dayson (2017) argues that the responsibility for implementing SP is with commissioners, and, moving forward, it is them who will determine the success of SP based upon their guidance and investment. Consequently, a top-down approach is required to support the design and implementation of SP (Dayson, 2017). This is relevant to the macro (system) level of integration of the RMIC, which refers to the linkage of healthcare services through rules, physical space, structures, and policies (Fares et al., 2019, Valentijn et al., 2013). It is also associated with the outer layer of Dahlgren and Whitehead's (1991) model of the SDH which highlights the importance of the general socioeconomic conditions.

The mechanisms presented in figure 7.2 provide guidance on the mechanisms required to support the design and implementation of SP. These can be used to inform the development of new services, practice guidance, and policy. NHS England (2020b) recently produced a model which set out the key elements for a good SP service. The model for best practice shares similarities with the mechanisms identified in this research. Both the NHS model and figure 7.2 argue for easy referral systems, training for staff, a common outcome framework, support for VCSE groups, and partnerships between stakeholders. Whilst there are similarities between the NHS model and the mechanisms identified in figure 7.2, there is limited detail provided by the NHS model relating to how these factors can be put into practice. For example, the NHS' model does not explain how easy referrals will be implemented, or advocate for a consistent approach to this, whereas this thesis identifies IT processes to support referral. Furthermore, although the NHS model advocates for partnership working, apart from co-location, it does not suggest how these relationships could be developed. This research considers factors which could support partnerships, such as a clear understanding of stakeholder roles and the involvement of all stakeholders in service design. Finally, the NHS model focusses on factors at the service level, but there is little detail on what needs to be in place at a

wider level to facilitate SP (e.g., stakeholder perceptions). So, whilst the model provided by the NHS is useful to support service design, it is insufficient to support the wider development of the concept of SP.

SP involves coordination across different levels and sites within and beyond the health sector (Contandriopoulos et al., 2003, Goodwin, 2016, Leutz, 1999, Lewis et al., 2010, National Voices, 2013). It requires horizontal integration (Goddard and Mason, 2017, Valentijn et al., 2013), which brings together healthcare services, social services, and other care providers (Goodwin, 2016), and vertical integration which focusses on integration between providers at different points in the healthcare pathway (Baxter et al., 2018b, Goddard and Mason, 2017). Despite much policy supporting integrated care (NHS England, 2019c, NHS England et al., 2015), links between primary healthcare and the VCSE sectors are typically underdeveloped in the UK (Charles et al., 2018, South et al., 2008). This, and former research identified a dearth of formal links between healthcare and SP (Goodwin, 2011, Ham and Smith, 2010, Harlock et al., 2019), and this creates barriers to the personalised and coordinated care offered (Bramwell et al., 2015).

Whilst some healthcare practices have established links with SP services, these links are not consistent between practices (Curry et al., 2011). To support the implementation and delivery of SP, this research concluded that services need to be formally linked with healthcare. It has been suggested that the co-location of healthcare and community services could support partnership working due to the increased opportunities for communication, for example link workers being physically located in general practice (Griffiths et al., 2004, Hamilton-West et al., 2019, Skivington et al., 2018b). This is in line with the NHS' recent guidance for SP which calls for link workers to be part of multidisciplinary teams in primary care (NHS England, 2019c). This addresses the need for formal links, but simply locating services together does not guarantee partnership working (Øvretveit, 2011). Instead, in community nursing, research found that a shared space is not vital, instead the promotion of good working relationships and the development of communication channels is (Bramwell et al., 2015). Furthermore, shared understanding of concepts, and clear and agreed goals have been found to be important for effective working (Bower et al., 2003, Bramwell et al., 2015, Mickan and Rodger, 2000).

A structured and consistent approach to the linkage of SP and healthcare is required which considers the wider factors that impact partnership working, not just the location of staff as in the recent NHS guidance (NHS England, 2020b). This thesis contends that a concise definition of SP, and an understanding of the processes involved in the concept will facilitate communication between stakeholders. Also, a preparation period is argued for, in which stakeholders are consulted on the

development of SP services to promote ownership, address any unforeseen barriers, and manage any training needs. Furthermore, the development of electronic referral forms built into healthcare IT systems is suggested to facilitate partnership working. These factors should be considered alongside the co-location of SP services.

The development of formal links between SP and healthcare is thought to not only increase its standing amongst healthcare professionals, but also increase service user's awareness of the option. Moreover, it will provide SP with a level of authority that it is not currently afforded. This will address the concerns raised by GPs and link workers in the current study. This is also supported by research in which health professionals said they had more confidence making a referral to a non-medical service if it had been endorsed by a statutory service (White et al., 2017). Furthermore, this aligns with the views of link workers interviewed who expressed the importance of SP being linked with healthcare to ensure it is valued for the important contribution it can make to health. However, before strategies to promote partnership working can be addressed, further clarity on who should be funding SP services, and where they are positioned (e.g., in the NHS, local authority, or VCSE) is required to ensure a consistent approach (Cole et al., 2020). Future research should evaluate SP as an NHS service (NHS England, 2020b), specifically how partnership working can be facilitated.

7.2.2.2 An Improved Evidence Base

An improved evidence base is required to facilitate the development of good services through the identification of areas for improvement, to understand the service user population and target services accordingly, to improve the awareness and perception of SP, and to justify the funding of such services. This section discusses methods to support the development of the evidence base for SP.

Despite the need for effort at the policy level, the current evidence base for SP lags behind practice (Husk, 2017), and, therefore, there is a dearth of good quality evidence to support the wide-scale implementation of the concept (Fancourt et al., 2019a, Husk et al., 2019, Price et al., 2017). Some research presents positive findings (Dayson et al., 2013, Grant et al., 2000, Grayer et al., 2008, Kimberlee et al., 2014a, Mossabir et al., 2015), however, insufficient data are available to demonstrate the large-scale or long-term impact, and comparison between services is challenging (Centre for Reviews and Dissemination, 2015, Rempel et al., 2017). Consequently, effort at the policy level is not justified. However, without many of the factors identified in this research, such as a consistent understanding of the concept, investment into data management, or adequate staffing, the evaluation of services is challenging, therefore the need for an evidence base cannot be considered independent from the other mechanisms identified. To address the need for further evidence to justify the wide-scale implementation of SP, a phased approach to national

implementation is recommended. This could be facilitated through the creation of test services. In these, the mechanisms could be addressed, and the services evaluated to determine the value of implementing SP at a national level.

To support evaluation and the development of an evidence base, consistent data and outcome measures need to be collected between services. However, there are inherent challenges with evaluating integrated care using reductionist randomised controlled methodology or quantitative measures alone (Brown et al., 2003, Ismail, 2017). This is because, compared with single interventions, integrated care encompasses multiple components, services, and outcomes (Brown et al., 2003, Ha et al., 2020). For example, an individual's usage of healthcare services might not have decreased, but this might be due to an ongoing medical issue, instead their involvement in SP might have led to positive outcomes in other areas, such as wellbeing or fitness, and these might create long-term benefits. Furthermore, whilst research into social interventions (e.g., walking groups) is applicable, it does not wholly reflect SP in practice, as an individual may have been connected with multiple sources of support as part of their social prescription (Cole et al., 2020, Kimberlee, 2015a). Moreover, the support of a link worker in some models of might have had additional benefits which need to be captured to support the funding of this role.

Due to the variation between SP models and potential outcomes, a single measure of effectiveness is challenging to determine (NHS England, 2020b). Some research focusses on healthcare usage as a measure of success as this is a quantitative variable which can be compared between services, and is of interest to funders (Rempel et al., 2017). This measure is useful as many of the outcome measures currently employed in SP research collect self-reported data for which reliability and accuracy cannot be established (OECD, 2013). However, evidence that SP reduces an individual's healthcare usage is mixed, with some research finding no significant difference between SP and typical care (Grant et al., 2000, Maughan et al., 2016). Link workers interviewed stressed that it was challenging to produce such quantitative evidence for their service as it is difficult to quantify the prevention of worsening health and the wider benefits which may be experienced. This is challenging to consider without rigorous research methods such as RCTs or longitudinal research. For example, if a SP service supports an elderly woman to have handrails fitted in her home, this could prevent her having a fall which could lead to a hospital stay, and potential further complications. This event would have resulted in a high cost to the healthcare system; however, it was prevented by the handrails. Installing the handrails in the elderly woman's home may be costly, and her primary care attendance may not reduce, however if the potential future benefits are considered in a long-term evaluation, the money saved may be significant. Yet, currently, there is limited rigorous research into

SP which considers a range of variables (Centre for Reviews and Dissemination, 2015, Rempel et al., 2017).

The quality of the data collected by services directly impacts the quality of the evidence base. This thesis has argued for the development of a standardised data management system for all SP services. This system should not only prescribe the collection of demographic data needed for the service, but also outcome measures to support the development of an evidence base. A common outcomes framework for SP should be adopted which encompasses a range of outcome measures (e.g., wellbeing, physical health, and healthcare usage). This framework should prescribe the core data which are to be collected to support national evaluation and allow for additional data to be collected to support the local evaluation of services and the completion of research. To address the need for consistent data collection and evaluation of services, NHS England has outlined a common outcomes framework for measuring the impact of SP (NHS England, 2020b). This is based on the impact of SP on the person, the health and care system and community groups. The framework recommends the collection of specific data such as the Patient Activation Measure (PAM), the reasons for referral, and the support connected with. Guidance states that link workers should be collecting this data every 6 months from VCSE organisations, and at regular intervals from service users (NHS England, 2020c). However, link workers interviewed in this research highlighted issues with capacity relating to data collection and analysis, and those in study I did not see data collection to be an important part of their role. Consequently, it is important that data collection is included as a core part of the link worker role, adequate time is allowed for it, and training is provided. To address this, recent guidance for link workers has been offered online, and training is in development to support link workers in this new aspect of their role (NHS England, 2020c), but the impact of this in practice is yet to be seen.

Currently there is no data management system to collect and collate the outcome framework data, and the framework is only recommended by the NHS rather than imposed. To support the development of an evidence base, the collection of outcomes data should be mandatory for SP services. To facilitate this, the outcome framework should be built into the dashboard for link workers currently being developed by the NHS (Cole et al., 2020). However, this only supports services funded by the NHS, this also needs to be made available to non-NHS SP services. Furthermore, the NHS outcome framework (NHS England, 2020b) does not advocate for the collection of any qualitative information from service users or referrers (e.g., GPs). Considering the complex and multifactorial reasons that individuals access SP, it is unlikely that all outcomes important to users will be captured by the quantitative measures proposed by the framework (Brown et al., 2003, Ismail, 2017). SP supports the SDH, the outcomes from which might not be

captured in a quantitative measure (Brown et al., 2003, Cole et al., 2020, Ha et al., 2020). The outcome framework should include the ability to record qualitative information. Whilst this would not be collected in a rigorous manner, it might distinguish areas for further investigation in research or areas for service improvement.

It was identified that it is not just a lack of data management tools and challenges with outcome measures that impact the development of an evidence base for SP. Even if data were properly collected and managed, link workers interviewed reported barriers to analysis. Proper analysis requires staff with the time and skills to conduct analysis which is not always possible in small organisations (Casas et al., 2013, Ógáin et al., 2012). A report of data in VCSE organisations found that 70% of organisations surveyed believed there was greater potential in the data their organisation held than was being extracted (Blackbaud, 2014). However, 56% felt that they lacked the resources to make use of these data, and 28% stated that maintaining data quality was a drain on their resources. Link workers interviewed agreed with this. They argued that their lack of access to data management software, training, and staff skilled in analysis was a key barrier to producing outcome data. Consequently, the development of an evidence base cannot be examined independent from the need for a common data management system and sufficient and secure funding for the recruitment and training of skilled staff.

7.2.3 Sufficient and Secure Funding

Whilst much policy, guidelines, and initiatives create a supportive climate for the development and implementation of SP services (Marmot et al., 2010, NHS England, 2014), and set out a vision for the future of the NHS focussing on new models of care (NHS England, 2014, NHS England, 2016c, NHS England, 2019c), there is limited financial support for its implementation (Dayson, 2017).

Stakeholders interviewed commonly cited resource limitations which could be addressed through increased funding. Dayson (2017) argues that the responsibility for implementing SP is with commissioners, and, moving forward, it is them who will determine the success of SP based upon their investment. Sufficient, and secure funding is required to support the implementation and delivery of SP; this is noted in figure 7.7. This is relevant to system integration in the RMIC (Valentijn, 2016), which refers to the linkage of healthcare services through rules, physical space, structures, and policies (Fares et al., 2019, Valentijn et al., 2013). It is also associated with the outer layer of Dahlgren and Whitehead's (1991) model of the SDH which highlights the importance of the general socioeconomic conditions for health.



Figure 7.7: Key mechanisms which support the implementation and delivery of SP (sufficient and secure funding)

A common concern amongst stakeholders interviewed was the inadequate and short-term funding offered to SP services. This is supported by research which has suggested that the future of SP services is unsecure due to them being funded by short-term grants, rather than commissioned like other services linked with clinical care (Thomson et al., 2015). GPs and link workers interviewed considered access to appropriate and ample funding vital to the success of SP. Link workers maintained that, if poor funding is awarded, then no funding might as well be given as it has such a substantial impact on the ability of the service to produce positive outcomes.

Stakeholders interviewed emphasised the impact funding had on staff capacity. Link workers argued that the limited funding currently afforded to services means that salaries are low, therefore skilled staff cannot be attracted. Also, positions are insecure due to the uncertain future of services, thus staff turn-over is high. Consequently, link workers reported that they struggled to dedicate time to additional tasks such as service evaluation and funding procurement. Capacity was such a concern that one link worker reported not advertising their service due to being uncertain whether they could meet the demand. In this instance, the service did not receive further funding after their grant expired due to a lack of outcome data, which was primarily due to the service being run by a single person who lacked capacity to complete all tasks (e.g., evaluation). The problem this link worker faced is not novel, in other research, link workers have reported that short-term funding and staffing issues created difficulties for service evaluation (White, 2012), and, therefore, challenges in procuring additional funding beyond the initial grant period (Dayson et al., 2013, Farenden et al., 2015, Polley and Dixon, 2016). This results in many services folding (Johnson and Ross, 2011, Thompson, 2015), and, in-turn this lack of longevity impacts how SP is perceived by healthcare professionals (Brandling and House, 2007).

To address this, sufficient and secure funding needs to be implemented at a policy level. If SP is to be formally linked with healthcare, as advocated for in this thesis, then services should not be required to bid for temporary funding as with the recent funding pledged (Department of Health and Social Care, 2018b). Instead, they should be commissioned; this will support the development and longevity of services. This concept is supported by NESTA (2013) who advocated for a more clear and secure funding pathway for SP, and it is echoed in the Guide to Community-Centred Approaches for Health and Wellbeing (Public Health England, 2015). This guide argued that, because most services available to NHS patients are commissioned by CCGs, SP should also be funded in this manner to ensure that it is viewed as an integral part of healthcare and to secure its future.

After completion of data collection, plans were put forward to support local healthcare systems to implement SP services, recognising their commitment to people's social wellbeing and its connection

to physical health (HM Government, 2018). To achieve this, the Department of Health and Social Care (2018b) secured £4.5 million in financial support for pre-existing SP services to bid for. However, this funding does not go far enough, just 23 services across the UK will be funded for three years. Whilst the report states that joint funding with local commissioners will also be agreed for a subsequent two years, after this, the future of the services is uncertain. Following-on from this, NHS England (2019c) set out plans for the long-term funding of SP. It detailed how primary care networks could fund additional staff to create multidisciplinary teams that would include clinical pharmacists, link workers, physiotherapists, and physician associates. These teams develop formal links between SP and healthcare. Furthermore, Universal Personalised Care (NHS England, 2019f) introduced plans for the NHS to fund the recruitment and training of over 1,000 SP link workers to be in place by the end of 2020/21, and rising further by 2023/24. This aimed to provide all staff within GP practices access to a link worker, therefore further developing formal links between SP and healthcare, securing long-term and sufficient funding, and supporting the findings of this research.

Despite a recent increase in funding for SP, concerns have been raised about the number of link workers to be funded by the NHS. On average, in the SP services funded by local authorities, there is a ratio of one link worker for every 5-10,000 people, however the new funding pledged accommodates approximately one link worker per 10-12,000 people (Cole et al., 2020). Study II highlighted that many existing SP services are struggling to cope with demand, therefore the number of funded link workers may be insufficient (Husk et al., 2019). Furthermore, research has found that, in light of this new funding pledged by the NHS, many existing SP services funded by local authorities have lost funding as there is a perception that the NHS is now taking responsibility for SP (Cole et al., 2020). Consequently, without an increase in link workers pledged by the NHS, or the continuation of funding from local authorities, there may be fewer link workers than are currently available. Further investigation is required to ensure the level of funding provided is sufficient to meet demand, and clarity over whose responsibility it is to fund SP services is needed considering the recent increase in funding streams published.

SP is dependent on a pre-existing and sustainable VCSE sector (Cole et al., 2020, South et al., 2008). Stakeholders interviewed expressed concern about service user's ability to carry out their social prescriptions due to financial challenges. Many referrals from SP services are to VCSE organisations, however some of these still require service users to pay a small fee (Figure 5.6 and Figure 6.12). It is not always possible for service users to pay, and this can, therefore, lead to a lack of engagement with social prescriptions. Due to a dearth of formal financial support, such services must charge users to ensure they can continue to provide support. GPs and link workers interviewed noted that a lack of funding for these VCSE organisations was a barrier to SP, as without support to refer users

into, SP is unsustainable; this was also identified in other research (Skivington et al., 2018b, The Health Foundation, 2015b, Whitelaw et al., 2017). Those interviewed expanded on this as they explained that the lack of longevity of such services made GPs reluctant to link individuals with VCSE organisations (SP signposting and light), and impacted perceptions of SP. The perceptions of VCSE stakeholders were not collected in study II, however previous research found that these organisations were concerned about the increased demand from SP, especially in light of the absence of additional funding (Cole et al., 2020). Future research should consider this group in relation to SP due to their important role in the process.

The importance of funding for not only SP services, but also for the referred to VCSE services was stressed in study II. SP aims to support the non-clinical needs of individuals; it is not simply the social prescription which does this, but also the referred to organisations. Therefore, there is a transfer of burden from the NHS to the VCSE for which there was no additional funding to address (Cole et al., 2020). Since completion of this research, the Universal Personalised Care plan (NHS England, 2019f) has proposed the funding of VCSE organisations, and the NHS' model for best practice has underscored the importance of such funding to ensure organisations have sufficient capacity to be involved in SP (NHS England, 2020b). However, despite this guidance recognising the importance of such funding, it lacks an explicit call for local NHS bodies to fund VCSE organisations. Therefore, whilst some organisations have received additional funds through various routes, currently there is no clear strategy for such funding. To address this, the NHS needs to work in partnership with other funding bodies, in particular local authorities, to develop a coordinated approach for the funding of those VCSE sectors involved in SP. This funding needs to be flexible between localities to support locality specific needs, for example the creation of supportive services in rural locations. This will support the development of services needed to address the needs of individuals, and the longevity of existing services (National Academy for Social Prescribing, 2020).

7.2.4 Information Technology Infrastructure

To deliver and evaluate a multi-organisational service such as SP, proper data input, management, and sharing is required. However, findings indicated that these factors are not widely adopted in practice. Data issues experienced in SP are consistent with those in other areas of healthcare (Grooten et al., 2018, Ha et al., 2020), which, despite advances, lags behind practice. Current data systems frequently fail, struggle to share information, and often do not follow modern cyber security practices (Department of Health and Social Care, 2018a). As the government releases new plans to tackle these issues (NHS England, 2019b, NHS England, 2019c), SP needs to be included. The Long Term Plan (NHS England, 2019c) set out intentions to introduce a Local Health and Care Record (LHCR) programme that will link general practice, hospitals, VCSE services, and social care. However, currently there are only plans to include a small number of VCSE care providers, such as hospices and care homes; therefore, this programme does not presently capture SP.

The development of a standardised data management system for SP services is required to support the implementation of SP, facilitate data sharing between services, and improve accessibility through the introduction of an integrated standardised referral form; this is displayed in figure 7.8. The need for proper data management and a straightforward referral process is an example of functional integration on the RMIC (Valentijn, 2016). Functional integration refers to the extent to which support functions enhance service delivery and integration at different levels (Valentijn et al., 2013).

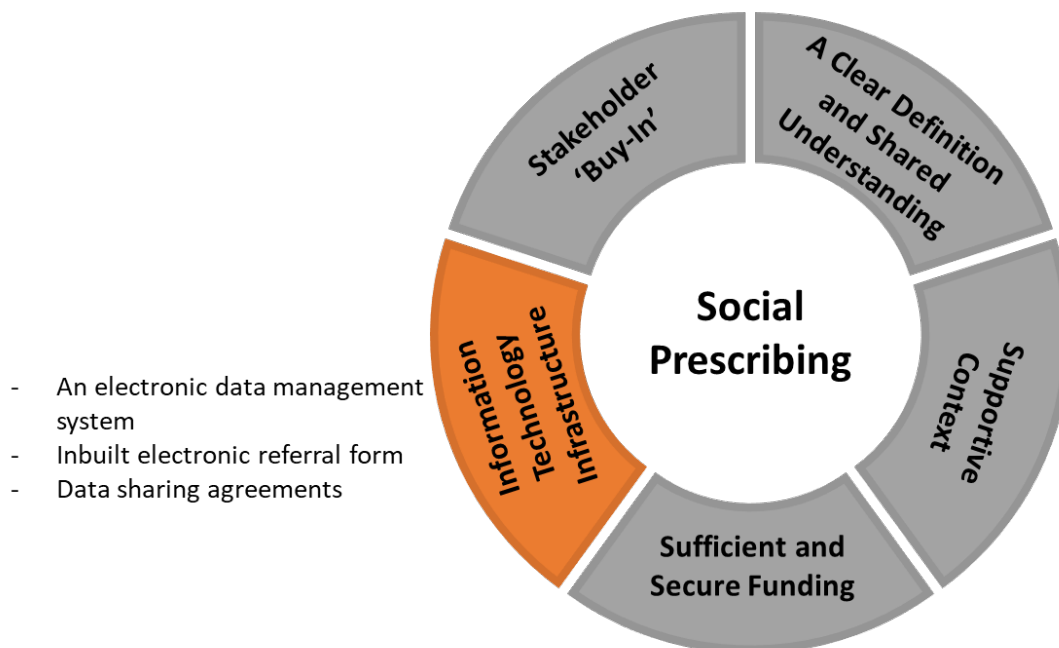


Figure 7.8: Key mechanisms which support the implementation and delivery of SP (IT infrastructure)

7.2.4.1 *Proper Data Management*

Proper data collection and management is required in SP not only to track service users and assess outcomes, but also to ensure patient safety (NHS England, 2020a). Much of the data collected during SP contains personally identifiable information which is protected under both the Data Protection Act (Department for Digital Culture Media & Sport, 2018, Great Britain, 1998), and, General Data Protection Regulation (GDPR) (European Parliament and Council of European Union, 2016). The proper storage of this is essential to reduce the risk of privacy breaches (NextGate, 2020).

Proper data collection is also required to support person-centred care to ensure that what matters to the service user is being collected, and can, therefore, be addressed (Wood, 2014). For example, the religion, ethnicity, or geographic location of a service user might impact the type of support they require, and, without these data, such wider factors cannot be considered. Furthermore, health inequalities disproportionately impact ethnic minorities (Evandrou et al., 2016, Toleikyte and Salway, 2018). It can, therefore, be assumed that this population are more likely to require a social prescription (Nazroo, 2003). Consequently, the spread of ethnicities accessing SP would not be expected to align with that of the local population as they did in study I, instead a greater proportion of users from BME groups would be expected. This thesis highlights the importance of guidance at the policy level to support the implementation of SP. Policy is designed to support the most disadvantaged in society, however, these groups cannot be empowered, and services which target their needs cannot be developed, if they are not represented in the data. It is imperative that proper data collection is adopted to not only provide evidence of this divide, but also to ensure the population accessing SP can be understood, and appropriate support can be developed.

During study II it became apparent that many SP services were using spreadsheets and others paper-based approaches to data management. Such approaches are common in SP (Bell, 2020) and some healthcare services (AHRQ, 2018, Dickinson et al., 2019, Sarkies et al., 2015). However, they are not conducive to proper data collection, storage, and analysis. For example, missing data was cited as a common issue experienced in the evaluation of SP services (Bickerdike et al., 2017), and was noted in study I.

To support proper data collection, the development of a standardised electronic data management system for SP is required. This system needs to prescribe the core data which are to be collected to support national evaluation. It also needs to allow for additional data to be collected to support the local evaluation of services, and the completion of research. The recording of data needs to be mandatory, for example, it should not be possible to leave cells empty as seen in study I. This system needs to be accessible for, and used by, all SP services. This would support data sharing between services, standardise the information collected, and could improve accessibility through an

integrated standardised referral form. This, in-turn, could support the combination of data from multiple services, and enable comparison between services.

The development of a standardised data management system has only been noted as a facilitator SP in two other evaluations (Aughterson et al., 2020, Pescheny, 2019). However, this may be due to the absence of implementation research in this area (Pescheny et al., 2018c). In the wider integrated care literature, the unavailability of data management systems has been identified as a barrier to implementation (Auschra, 2018, Cooper et al., 2016, Ling et al., 2012, Parkin, 2019). However, the development of IT systems which can be shared between social and healthcare organisations has been found to be challenging (Baxter et al., 2018a, Ha et al., 2020, Maruthappu et al., 2015). The reasons for this include incompatible computer systems, data sharing restrictions, and concerns regarding information governance (Mackie and Darvill, 2016, Sharp et al., 2018a); similar concerns were raised by GPs in the current research.

The need for a data management system has been addressed by certain organisations which have developed digital platforms for use by multiple SP services (Elemental, 2018, PSIAMS, 2018, ROVA Wellness, 2018). However, to ensure continuity, one platform needs to be accessible across all services. The NHS is in the process of developing a new data dashboard for link workers to be used across all NHS funded SP services. They aim to create a standardised national dataset for SP, which will support research into the concept (Cole et al., 2020). However, this is yet to be in practice, there is limited detail on this system available, and it does not address the need for data systems in those services not funded by the NHS. Furthermore, as most services with which individuals are connected are based outside of the NHS, and, therefore, are unlikely to be captured by this new dashboard, it is unclear how outcome data will be collected.

Data management which incorporates VCSE organisations is challenging due to data sharing restrictions, the number of such services, and the unstable nature of them. The experiences and perspectives of such organisations were not included in this research. Existing research with this group found that such organisations did not think that they should be expected to collect outcome data to support the development of an evidence base for SP as this would create additional strain and they did not have the appropriate technology; instead they noted that they could collect attendance data, and any outcome measures could then be collected by link workers (Cole et al., 2020). However, this adds an additional burden on the link worker role (e.g., the collection of follow-up data) and raises data sharing concerns. Further investigation is required to consider how outcome and adherence data can be collected in SP.

The implementation of a standardised data management system, even across just those SP services in the NHS, would require a significant financial investment. Not just for the purchase of the system and the necessary equipment, but also for the training of link workers. As evidenced in study I, simply having access to a data management system does not result in proper use. Consequently, the need for such a system cannot be examined independently from the need for sufficient and secure funding.

7.2.4.2 A Straightforward Referral Process to SP Services

GPs interviewed raised concerns about the accessibility of SP services. Despite research suggesting that holistic and medium SP could decrease demand on GPs' time by reducing the need for them to probe into non-medical issues (Bickerdike et al., 2017, Carnes et al., 2015, Centre for Reviews and Dissemination, 2015, Kimberlee, 2016), GPs argued that referring a service user to SP is time consuming, and, therefore, prevents them from utilising such services. This finding was supported by link workers in this, and previous research, who noted that they often struggled to meet targets due to a limited number of referrals from GPs (Bertotti et al., 2015, Laing et al., 2017, Mossabir et al., 2015).

Link workers interviewed discussed issues with the varying referral routes used in their services (e.g., fax, telephone, and paper-based forms), and expressed a desire to move to electronic forms built into the GP practice's computer system. This would enable healthcare professionals to refer patients to SP services through their existing computer system, rather than completing a separate referral form, therefore creating a clearer and more consistent referral process. It would also accelerate the process by enabling the automatic completion of variables, and by removing the need for GPs to contact services directly. Furthermore, it would support the development of formal links between healthcare and SP, as advocated for in this thesis. The recent NHS model for successful SP highlights the need for easy referral (NHS England, 2020b), however, except for referral via a link worker attached to a general practice, it does not prescribe how this will be implemented, or consider how referral to SP services outside of the NHS will work. Therefore, it does not account for SP services based outside of the NHS. An inbuilt electronic referral approach is required across all SP services, not just those based in the NHS, to support the standardisation of SP, and develop formal links between SP and healthcare.

Like existing research, study II found that SP services often receive inappropriate referrals (Laing et al., 2017, Mossabir et al., 2015). However, currently there is no formal route for link workers to refer back to primary care (Pescheny, 2019). Link workers stated that this can result in them managing needs outside of their remit, or service users being left without support. The introduction of a new

referral process should also include the capability for link workers to refer those who cannot be adequately supported by SP back to primary care.

The introduction of an inbuilt electronic referral form is relevant to SP medium and holistic only. Many of the services that individuals are connected with as a result of a social prescription are based in the VCSE sector, and these services often do not have access to electronic data management equipment. Therefore, currently there is no standardised method for GPs to refer patients to supportive services in SP signposting and light, and there is no standard electronic system in place for link workers to connect individuals with onwards support in SP medium and holistic. As service users typically complete their social prescription in services outside of the NHS, the lack of ability to follow these users using electronic databases creates issues in the measurement of outcomes. To address this, link workers could follow-up with service users and add information to their database, however this adds extra demand on their workload. Further investigation is required to identify a system to track individuals' outcomes as they carry-out their social prescription, and to monitor uptake and engagement.

7.2.4.3 Data Sharing Agreements

The development of a data management system and an electronic referral form would require data to be shared between not only SP services, but also primary care and SP. Some SP services have data sharing agreements with general practice, but this is not common. Research into integrated care states that the absence of shared IT systems hinders information exchange between care providers (Ha et al., 2020, Suter et al., 2009), and highlights the importance of information sharing within integrated care services for successful implementation (Weiner, 2009). Consequently, data sharing agreements are required to facilitate the development of new IT infrastructure for SP, thus supporting functional integration.

Link workers interviewed in study I maintained that the current restrictions on data sharing prevented them from addressing certain outcomes sought by funders. For example, they stated that it was challenging to evidence that they had reduced GP attendances without access to GP attendance data. Whilst SNOMED CT coding for SP has been established in GP systems to support national data collection on referrals from primary care, but this simply records the number of referrals, it does not account for those who fail to engage (NHS England, 2020b). Community Action Southwark (2015) argued that better data sharing was required to increase opportunities for service evaluation.

Data sharing would be beneficial to proper data collection, as, in study I, the data which was most completed was that which were automatically completed by the general practice's computer system

at the point of referral (e.g., gender, age, and postcode), and those variables which were computer generated (e.g., registration number and presenting issues ID). If more information could be shared from general practice then less information is needed to be collected by link workers, therefore reducing the potential for missing data. However, although link workers interviewed expressed frustration about the current lack of data sharing, GPs raised concerns due to a lack of data protection controls. These concerns were supported by the findings of study I in which the poor handling of data in the participating SP service was discussed. Consequently, alongside the introduction of data sharing agreements, increased data governance is required in SP and increased training for staff is necessary; this is likely to be facilitated by the move of SP into NHS services (NHS England, 2019f). The recently published Outcome Framework also notes that data-sharing agreements between the NHS and local services are required (NHS England, 2020b) for SP. It states that the NHS will provide support for local SP schemes and CCGs to develop data sharing agreements around impact on the health and care system. However, research into the practicality of this is still underway, and there is no clear guidance on data governance.

7.2.5 Stakeholder 'Buy-In'

Stakeholder support is integral to the implementation and delivery of SP. Without this, GPs are unlikely to make referrals to services, and service users may be unwilling to engage. This is supported by the RMIC which highlights the need for organisational and professional (meso) integration. Organisational integration describes the delivery of services in a linked-up fashion (Valentijn et al., 2013). It relies upon the sharing of role, competencies, and responsibilities between different services (Fares et al., 2019). Professional integration describes partnerships within (intra) and between (inter) organisations (Valentijn et al., 2013) to promote shared accountability for health outcomes (Goodwin and Smith, 2011, Shortell et al., 1996).

At a broad level, all stakeholders interviewed perceived SP to be important due to the provision of person-centred care. Specifically, service users valued the peer support and education opportunities offered. GPs raised concerns about their involvement, although they did note that they often felt unable to deal with social concerns due to time constraints and a predisposition to clinical issues. This suggests that SP has a role to play in the identification and response to non-medical needs. However, GPs explained that they were cautious about referring patients to services outside of the NHS which they did not have a relationship with. Whilst this can be addressed through the inclusion of SP in the NHS, not all services are funded in this manner. Based on existing literature, quality assurance processes and the use of preparation phases are recommended to address the concerns raised by GPs in this research. The mechanisms, and key features, identified to support the implementation and delivery of SP are displayed in figure 7.9.

- An understanding of service user wants and needs
- The delivery of personalised and holistic care
- A preparation phase
- GP support



Figure 7.9: Key mechanisms which support the implementation and delivery of SP (stakeholder 'buy-in')

7.2.5.1 The Provision of Personalised and Holistic Care

Objective two was to examine stakeholders' perceptions of SP in the context of healthcare. In most literature the rationale for SP is typically to address health inequalities due to social factors (Wigfield et al., 2015) and long-term health issues (ERS, 2013, Health Services England, 2015), to encourage healthy behaviours and self-management (Kimberlee, 2016), to prevent ill-health (Dayson and Bennett, 2016a), and to reduce demand on healthcare services (Carnes et al., 2015, Centre for Reviews and Dissemination, 2015, Kimberlee, 2016). Many justifications for SP in healthcare offered by stakeholders interviewed did not differ widely from those identified in the literature. Though, it was found that, at a broad level, stakeholders valued the opportunity for person-centred care through SP. Typically, healthcare tends to be disease focussed, it looks at ways specific conditions can be managed (Stange and Ferrer, 2009, Valentijn, 2016), similar to self-management. However, as everyone has a different experience of the SDH, non-medical support needs to be tailored to the individual (Dahlgren and Whitehead, 1991, McFarland and MacDonald, 2019, The Health Foundation, 2016). This can be addressed through SP, as the RMIC contends that integrated care adopts a person-focused approach to improve an individual's overall health and wellbeing (micro integration) (Valentijn et al., 2013).

Person-centred care offers service users more choice and control by providing care that is appropriate to the individual's needs (NHS England, 2019f, RCGP, 2020). This is reflective of SP as

healthcare professionals or link workers work with individuals to understand their needs and identify appropriate support (Kimberlee, 2015a). Research has found that well-being, quality of life, satisfaction, and overall experience is improved through the provision of good quality personalised care (Coulter et al., 2015, Macmillan, 2016). Furthermore, a positive relationship between patient participation in decision making and adherence, satisfaction with care received, and improved health outcomes has been found (Clayman et al., 2016, Mukoro, 2011, Vahdat et al., 2014). Whilst all models of SP provide personalised care, GPs interviewed explained that they have limited time to assess the needs of their patients, and they are focussed on medical issues. Therefore, medium and holistic SP is important for the provision of personalised care as link workers have increased capacity and knowledge on non-medical referral options; this is also emphasised in recent SP guidance (NHS England, 2020b). Service users interviewed valued the time link workers spent with them in assessing their needs and creating personalised support plans; this allowed complex and multi-factorial issues important to the service user to be addressed.

Findings from this research support the NHS' view that SP could address the need for personalised care (NHS England, 2019c), and can, therefore, make a valuable contribution to healthcare. The notion that SP offers personalised care is not novel (Kimberlee et al., 2014a). However, obtaining this information from stakeholders in relation to the importance of SP is novel. No rigorous research could be found which has explored the perceptions of three stakeholder groups. Furthermore, few studies have examined service user views on SP, typically the focus is on outcome measurement or adherence (Crone, 2011, Grant et al., 2000, Kimberlee et al., 2014a, Krska et al., 2013, Morton et al., 2015, Vogelpoel and Jarrold, 2014, White and Salamon, 2011). In one study exploring service user views of exercise on referral schemes, it was found that the service being perceived as personalised was crucial to co-operation with advice offered (Morgan et al., 2016). This supports the findings of the current study. This suggests that, to increase up-take and adherence, an issue experienced in SP (Brandling et al., 2011, Grant et al., 2000, Loftus et al., 2017), services need to ensure that the personalised nature of SP is at the forefront of their service. This conclusion is supported by locality specific research which found that a person-centred approach facilitated the uptake, and ongoing adherence, of similar services (Killingback et al., 2017, Moffatt et al., 2017).

7.2.5.2 GP Support for SP

SP services are typically dependent on referrals from healthcare professionals (Kimberlee, 2013), therefore support from this group is important for the implementation and delivery of SP. GPs interviewed argued that their involvement in the SP process medicalised issues that did not require medical attention, consequently, not reducing demand on healthcare services. Research has found that there is only a small difference in healthcare usage between those who have received a social

prescription and typical healthcare (Grant et al., 2000, Maughan et al., 2016), thus supporting the views of the GPs interviewed. However, despite reservations, GPs did note that they often felt unable to deal with patients' social issues due to time constraints and a predisposition to clinical issues. This suggests that holistic SP has a role to play in supporting the identification and response to non-medical needs in primary care. This was also identified in a recent examination of GPs' perspectives of SP. In this, GPs noted that they felt limited by the short appointments they had with patients, and believed that link workers were more able to offer a personalised approach (Aughterson et al., 2020).

Despite potential benefits, in interviews GPs explained that they had reservations about referring their patients to a SP service of unknown quality which may not be available in the long-term as this reflected badly on them as practitioners. They were also concerned about their accountability and liability for referrals which did not result in a positive outcome for the service user. These concerns could be addressed through the development of formal links between primary care and SP. Specifically, the incorporation of SP into the NHS (NHS England, 2019c), as research has found that referring to non-NHS services is a barrier to health professional engagement in SP (Whitelaw et al., 2017). However, currently not all SP services are positioned in the NHS. Instead, SP needs to be established as a reputable intervention, irrespective of how it is funded, to improve GP perceptions. To facilitate this, research has indicated the need for quality assurance (Mossabir et al., 2015, Pescheny, 2019, Whitelaw et al., 2017). This could support GPs to feel confident that they are referring their patients into a secure and reliable service (Whitelaw et al., 2017). Whilst NHS services are likely to have rigorous quality assurance processes, this is not the case for all services outside of the NHS. This quality assurance process would need to be implemented at the policy level to ensure consistent implementation across the UK. This may support GP engagement and, therefore, professional integration of the RMIC (Valentijn, 2016).

To further improve GP perceptions of SP, a preparation phase prior to implementation has been recommended in previous research (Brandling et al., 2011, Farenden et al., 2015, Pescheny, 2019). In this, SP is implemented in stages rather than all at once, therefore allowing time to build relationships with stakeholders, ensure roles within the concept are clear, and address any educational and training requirements (Farenden et al., 2015, Royal Society for Public Health, 2019, Whitelaw et al., 2017). Furthermore, it supports co-creation as advocated for in the RMIC (Valentijn, 2016). Link workers interviewed explained that it was difficult to develop SP services in the short timeframe awarded to them. This was because it took time for them to develop relationships with service providers in the VCSE sector and healthcare professionals. One link worker stated that they were halfway through their funding period before they were ready to start accepting referrals. This

meant that they were not established for long enough to develop a reputation before the service closed, and that they experienced barriers in practice, specifically in receiving referrals from GPs. This has also been found in other research in which a SP service was not afforded the time to develop relationships with stakeholders or develop effective working practices and, therefore, experienced barriers to implementation of the service (Farenden et al., 2015). The use of a preparation phase before the introduction of SP services could foster a shared understanding of SP, and involve healthcare professionals in the design of services to address any unforeseen barriers; this would also promote ownership of the service within primary care and hopefully lead to increased use and improved perceptions (The Health Foundation, 2015b, Wessex Academic Science Network, 2017).

7.2.5.3 Service User Support for SP

Consideration of why service users value SP, including the specific areas of support appreciated, is important to inform the development of services around the wants and needs of the user. This could also help improve the issues relating to uptake and engagement experienced by many existing services (Friedli et al., 2012, Loftus et al., 2017, Lovell et al., 2017, White et al., 2010). Unlike much research that has only involved service users in relation to outcome measurement or adherence (Crone, 2011, Grant et al., 2000, Kimberlee et al., 2014a, Krska et al., 2013, Morton et al., 2015, Vogelpoel and Jarrold, 2014, White and Salamon, 2011), the current study sought service users' opinions on SP.

Service users interviewed focussed on the supportive services offered through a social prescription rather than the social prescription process itself. In particular, they valued educational opportunities. Whilst many SP evaluations mention the availability of educational programmes (Bickerdike et al., 2017), the high regard that service users held this in has not been reported previously. Perhaps due to much research into SP aiming to evaluate the effectiveness of a service to justify the need for its existence, rather than to understand the role SP can play in the wider context of health and social care. The educational benefits valued by service users were not only formal educational opportunities. They also valued information gained from attendance at illness specific groups. For example, Breathe Easy is a support group for COPD patients which invites speakers to convey information relating to equipment usage, benefit support, and other practical aspects of the illness that may not be conveyed by healthcare professionals but can have a significant impact on quality of life. Even a small investment in community learning has been found to have significant positive impact on health outcomes for individuals, such as enabling service users to feel more positive, increasing understanding of a health condition, and improving diet (Novitzky, 2013). However, these

findings are not linked to SP, therefore, further research is required to investigate the impact of education through SP.

Service users interviewed reported that they valued the peer support component of group attendance. Peer support promotes person-centred care by facilitating contact between people with lived experience to foster a sense of connectedness and the communication of shared experiences (Ibrahim et al., 2020, Steigman et al., 2014). Service users interviewed stressed the importance of being able to socialise with people in similar situations to themselves; this allowed them to share information relating to their condition and receive reassurance. Harrison (2014) found that those who are, or have been, in similar circumstances to service users are best able to offer support in SP services. However, no detail of the research methods used is provided, therefore raising concerns regarding the rigour of this research. The benefits of peer support have been examined in a rigorous manner in other healthcare contexts. Research has found that it is valued by users (Hoey et al., 2008), and leads to improved health outcomes (Boothroyd and Fisher, 2010, Chan et al., 2014, Ramchand et al., 2017, Thom et al., 2013). One report notes that peer support volunteers, similar to link workers, can reduce demands on health and social care in the long-term (Community CVS, 2017). However, this research drew upon quotes received via feedback forms completed by service users, and, therefore, their claim of a reduced healthcare usage cannot be substantiated. From the current research it can be determined that service users valued the opportunity to meet others in similar circumstances to themselves, and, therefore, they considered SP to be important to facilitate this. Peer support is increasingly adopted to transform mental health care towards a recovery orientation approach (HM Government, 2011, Ibrahim et al., 2020, World Health Organization, 2013). Service users interviewed highlighted how SP could be used to promote and implement peer support interventions.

7.3 Limitations of the Research

The findings of this thesis should be considered in light of the limitations discussed in the following sections. Due to the different nature of the methods adopted in study I and II, their limitations are discussed separately.

7.3.1 *Limitations of Study I*

Study I utilised pre-collected data from a SP service working in a specific area of the United Kingdom. A limitation of secondary data is that data collection is outside of the researcher's control, and therefore the quality is unknown; this issue was experienced in this research. The study aimed to determine the contributory factors to requiring a non-medical intervention. However, due to the poor-quality of the secondary data obtained (discussed in section 5.2), the anticipated statistical analysis was not possible, therefore a data driven approach to analysis and knowledge generation was taken. Firstly, descriptive statistics were applied to some data to describe the service user population and examine process data. However, this type of examination of the SP service user population is not novel, many other service evaluations have also presented descriptive information on their service user population (Carnes et al., 2017, Dayson et al., 2016, Dayson and Bennett, 2016a, Dayson and Leather, 2018, Healthy Dialogues, 2018, Kimberlee, 2016, Liles and Darnton, 2017).

In-line with the critical realist stance adopted in this research, the context that the research was carried out in must be considered (Zachariadis et al., 2013). Due to SP being a varying concept, the context in which these data were collected is likely to differ from other SP services. This impacts the transferability of findings to other settings and reduces the external validity of results (Bowling, 2014). To address this impact on validity some of the data collected was compared to census information (section 5.3.1), and, whilst consistencies were found, the accuracy of this was questioned.

7.3.2 *Limitations of Study II*

In Study II, qualitative semi-structured group and individual interviews were undertaken with GPs, link workers, and service users. Due to these data collection methods being reliant on self-report, the accuracy of the data collected is affected (OECD, 2013). This is for two key reasons, firstly due to the interviewees being asked to recall things from memory (Short et al., 2009). This is a particular issue when considering the service user group who were asked to recall how they were referred to SP services, or social interventions, and the process involved in this. For some service users this required them to recall information from a few years ago which might be challenging and may affect recall accuracy (Bhandari and Wagner, 2006). The accuracy of memory is also a concern in the GP

group. For example, when GPs were asked how often they prescribed socially all gave a rough amount. This impacts the credibility of results as this finding is unlikely to be congruent with reality. The second issue with self-reported data is that interviewees may feel pressured to provide socially desirable answers to questions (Althubaiti, 2016, Latkin et al., 2017, van de Mortel, 2008). All service users were either recruited through, and at times interviewed during, a social intervention, or were recruited by their SP link workers. The service users recruited through a social intervention may have felt pressure to provide the interviewer with answers they thought to be desired by the managers of the social intervention; this is despite the information sheet detailing that responses would remain anonymous. Also, some service users recruited in this way were interviewed as a group, during which they may have experienced pressure to conform to the views of others in the group (Acocella, 2012). Those service users recruited by their link worker were either interviewed in their own home or over the telephone. This recruitment method may have compelled the service users to give positive answers to questions relating to their SP experiences to please their link worker. However, as these interviews were conducted in the privacy of the service users home, or over the phone, the link worker was not present, and service users likely felt comfortable in their surroundings, thus minimising this effect (Mann and Stewart, 2002, Meho, 2006).

The potential for inaccurate socially desirable answers was also present in the GP and link worker groups. GPs may have exaggerated the amount of SP they carry out or falsified positive opinions of it if they assumed that this would be favourable to the researcher and their professional standing. However, GP interviews were all carried out either at the GPs place of work or in their home, reducing the likelihood of this as they likely felt comfortable in these environments, therefore less likely to feel obligated to agree with the researcher. Link workers were all interviewed at their place of work and as a group. Recall might have been supported by conducting the research in their place of work as there are prompts present and participants can be observed in their work environment (Edwards and Holland, 2013). However, the presence of other link workers may have compelled interviewees to agree with others in the group, and provide the researcher with answers they deem desirable to other members of their team (Stodel, 2015).

The impact of socially desirable answers on validity needs to be considered. The credibility of the findings is reduced as interview responses may not be congruent with reality (Harvey and Land, 2017, Merriam, 1998, Trochim and Donnelly, 2006). To mitigate this, the current study implemented person data source triangulation (Denzin, 1989) and consistent results were found between groups. Therefore, it can be assumed that credibility was not impacted in this research. However, whilst GPs

are typically the primary source of referrals to SP services, other healthcare professionals do refer. For example, those who are not traditionally prescribers, such as pharmacists and nurses, occasionally make referrals to services. Due to their different backgrounds, their perception of SP is likely to differ from a GP's. Therefore, focussing on GPs does not accurately represent the views of all referrers. Future research should consider these broader referrer perspectives.

Only those fluent in English were eligible to participate in this study. This was due to the limited resources for translation services, and the language spoken by the researcher. It can be assumed that not all service users would have had English as their first language, and, therefore, the service user sample was not representative. Furthermore, generalisation is an important element of research and it has been argued that there is little value in funding qualitative research into policy relevant areas, as findings cannot be transferred into other contexts or generalised to larger populations (Saks and Allsop, 2012, Smith, 2018). However, it is acknowledged that qualitative research is important for policy because it provides information about why an intervention is successful, and in which contexts (Bonell et al., 2012).

The methods used to recruit each stakeholder group may have compromised the dependability of the findings. GPs were recruited through a variety of channels, all of which advertised for voluntary participation. Due to this, some GPs mentioned that the researcher was unlikely to obtain data from GPs who had a negative view of SP, or from those who were indifferent to it, it would only be those who were motivated to increase its usage that would put themselves forward for participation. However, this was not the case, not all GPs had a positive opinion of SP, and all GPs expressed some concern about it. Link workers were recruited through the organisation that they work for. Due to them working in SP, it is unlikely that they would have a negative opinion of the use of social prescriptions, and they may have felt uneasy being negative about the SP process in front of colleagues. However, all link workers expressed concerns, and all offered their opinion on the perceived barriers to effective SP. Finally, service users were recruited by their SP link workers, thus it is possible that link workers only approached those service users who they thought would provide the researcher with a positive account of SP. Although all service users contactable by the link worker were engaging with the service, therefore it is unlikely that any would have a negative opinion of the service, as this would imply that they would disengage. It was not possible to identify those who had been referred to a SP service but had failed to engage, or those who suffered a negative experience since engagement and subsequently disengaged. Therefore, those interviewed are not representative of the population referred to SP services but are likely to be representative of the SP service user population. Moreover, due to the recruitment methods employed with the

service user population, those who had received a social prescription from a healthcare professional, SP light and signposting, are underrepresented in the sample.

Different data collection methods were utilised with each stakeholder group which may have affected the responses given by interviewees. Data were gathered from GPs using individual face-to-face interviews, from link workers in face-to-face group interviews, and finally from service users through individual and group face-to-face interviews or telephone interviews; the method utilised with service users was based on their preference. The decision to offer a variety of data collection methods to service users was made to ensure they felt comfortable taking part in the research, especially considering many service users were experiencing social difficulties which may have prevented them from agreeing to meet new people face-to-face; a few service users chose to undertake a telephone interview for this reason. Without this option their opinions of SP would not have been captured. Other service users felt more comfortable answering questions in a group format, so group interviews were arranged. All link workers took part in group interviews, this was due to these being carried out during normal staff meeting times to avoid disruption to their normal working day, without this option, many would have been unable to participate. During the analysis stage, the findings from each group were compared and similar themes were found, implying that the differing data collection methods had negligible impact on data gathered. Moreover, the use of multiple data collection methods increases the validity of the research as dependability is achieved (Guba, 1981).

7.4 Chapter Summary

This chapter has drawn together the findings from study I and study II to address the research aim. It concluded that there is not a fixed list of barriers to SP in practice, instead, if any of the elements of SP are missing, these therefore become barriers. The factors identified which support the implementation and delivery of SP were presented against the domains of the RMIC (Valentijn, 2016). However, it was noted that the domains do not exist in isolation, there are complex relationships between all factors identified irrespective of the related domain of integration. This is supported by the critical realist stance taken which notes the possibility of relationships between elements within a system (Mingers, 2000). Due to relationships between the factors identified, they were summarised as the following five mechanisms which support the implementation and delivery of SP: a clear definition and shared understanding, supportive context, sufficient and secure funding, IT infrastructure, and stakeholder 'buy-in'. When considered at a broad level, these mechanisms suggest that SP needs to be established as a reputable intervention with formal links to healthcare. Each mechanism requires a consistent approach at a national level to facilitate both practical

supports, and to improve understanding and perceptions. This, therefore, need to be tackled using a top-down approach (Polley et al., 2017a, Valentijn, 2016). However, currently the evidence base is insufficient to support the wide-scale implementation of SP (Centre for Reviews and Dissemination, 2015, Rempel et al., 2017). Consequently, effort at the policy level is not justified. Despite this, without a consistent understanding of the concept, investment into data management and outcome measures, or adequate staffing, the evaluation of services is challenging, therefore the need for an evidence base cannot be considered independent from the other mechanisms identified. The mechanisms, alongside key features, are presented in a circle in figure 7.2 to communicate their interconnectivity. The identification of these mechanisms supports the implementation and delivery of SP and facilitates the evaluation of services. Each of the mechanisms identified were discussed before the limitations of both study I and II were reviewed.

Chapter 8: Conclusion

8.1 Introduction

The purpose of this chapter is to present the contributions to knowledge generated in this thesis, and to consider the implications these have for policy, practice, and education. After this, recommendations for future research are offered before the thesis is concluded.

8.2 Contribution to Knowledge

This research makes contributions to knowledge in the domains of the theoretical, methodological, and practical. With further investigation it also has potential to contribute to policy.

The barriers faced by SP were identified in study II, and informed by the findings of study I. It was noted that these largely pertained to SP medium and holistic given that these models were not already positioned within healthcare. When considered with the literature, it was observed that there is not a fixed list of barriers, instead if any of the factors which support SP in practice are missing, these, therefore, become barriers. The supportive factors were mapped against the domains of the RMIC (Valentijn, 2016). However, the factors do not exist in isolation, there are complex relationships between them irrespective of the associated domain of integration.

Therefore, they were summarised as the following five mechanisms which support the implementation and delivery of SP: a clear definition and shared understanding, supportive context, sufficient and secure funding, IT infrastructure, and stakeholder 'buy-in'. When considered at a broad level, these mechanisms suggest that SP needs to be established as a reputable intervention with formal links to healthcare. Although not tested in this research, the identification of these mechanisms could support the development of new services, practice guidance, and policy.

The wider processes surrounding SP were distinguished in this thesis, and, through the development of this novel understanding of SP, a new definition of the concept was offered:

“SP is a process by which a healthcare professional or SP link worker assesses an individuals’ non-medical needs and connects them with non-medical sources of support, often within the community, to improve health and wellbeing.”

The definition more tightly applies the term by focussing on the point at which an assessment of the service user’s needs is conducted, and appropriate treatment is offered. Both GPs, or other healthcare professionals, and link workers perform these assessments in practice dependant on the model of SP implemented. The act of a service user being referred to a SP service is separated from the term ‘SP’ and instead named a ‘referral’. Furthermore, the non-medical focus of SP, the anticipated outcomes, and the use of community sources of support are referenced, therefore more

closely reflecting what SP offers in practice compared to pre-existing definitions. The roles of GPs and link workers in the process, outside of providing social prescriptions, were also identified, for example, the gatekeeper role held by GPs. It was apparent that link workers play a vital role in the holistic and personalised care offered. Therefore, it is noted that it is not simply SP which is valued by stakeholders, but specifically models which involve a link worker.

An understanding of the processes involved, and roles within SP can support the future design and implementation of services as individuals deliver a service which aligns with their understanding of a concept. Consequently, to support consistent delivery, a shared understanding of SP is required. The new definition offered supports this as it provides a concise and common frame of reference which is reflective of SP in practice; it allows stakeholders to articulate the mechanisms involved, and the outcomes that they are anticipating. If the concept is understood by healthcare professionals, and can be easily communicated, they can in-turn support their patients to understand.

In general, this thesis contributes rigorous research to SP's evidence base, which is currently of poor-quality. In particular, the uncommon combination of three stakeholder groups in study II provided an in-depth understanding of the concept. The application of philosophy to the methodology adopted in SP research is rare. The use of critical realism as the supporting philosophical framework informed the study design and data analysis and contributes towards its usefulness in SP research. The mixed methods design adopted, based on the critical realist stance, developed further insight into the data management processes in practice (observable events), and, therefore, provided a deeper understanding of some areas discussed in the qualitative interviews.

Finally, there are few studies which adopt theory to conceptualise or underpin SP. Consequently, this study expands on the use of the theory to understand SP in practice, specifically the use of the RMIC. The RMIC suggests that the implementation and delivery of SP is dependent on integration at multiple domains. This thesis argued that the domains could not be seen in isolation due to the relationships between factors at each level, therefore supportive mechanisms were identified which traversed multiple domains.

8.3 Implications of the Research

The findings of this thesis have implications for policy and practice, education, and future research; these are discussed in the subsequent sections.

8.3.1 *For Policy and Practice*

A clear and concise definition of SP is offered, as well as a brief understanding of the processes, roles, and mechanisms which support implementation. But this alone is insufficient to support the design of services. Interventions such as SP are passed down from a policy level to practitioners, and, despite many recommendations relating to SP, policy does not yet adequately support the implementation of services. Before SP can be established as a reputable intervention and formally linked with healthcare, detailed guidance for practice needs to be published at a policy level. The following key findings from this thesis can inform the development of this:

- The definition of SP presented in figure 7.4 is recommended for use in policy, practice, and education as this more accurately characterises both academia and practice than pre-existing definitions. Currently, whilst much policy literature supports the ideas of SP, it does not consistently mention or define it. The consistent use of this definition will support common understanding of the concept.
- A clear outline of the processes surrounding SP could facilitate consistent delivery, the comparison of services, and allow examples of good practice to be more easily shared. This thesis informs knowledge through the recognition of the point at which the social prescription occurs, and the wider processes surrounding this (figure 7.5). For example, it terms the transfer of individuals from healthcare to SP services a 'referral', therefore more tightly applying the term.
- Both link workers and healthcare professionals were identified as providers of social prescriptions, and GPs were found to perform a gatekeeper role. However, detailed descriptions should be developed for both groups which outline their roles and responsibilities within SP. For example, if link workers are required to collect data for service evaluation, this should be part of their job description, and they should be supported to develop these skills. Failure to include these skills in the job description could result in poor data collection and frustration. As, for example, in study I link workers did not perceive data collection and evaluation to be their job.
- The following five mechanisms were identified to facilitate the implementation and delivery of SP: a clear definition and shared understanding, supportive context, sufficient and secure funding, IT infrastructure, and stakeholder 'buy-in'. These mechanisms, alongside the

features of each (figure 7.2), can inform the design of services, and can help identify why services may not be succeeding. The mechanisms were summarised as the need for SP to be established as a reputable intervention with formal links to healthcare.

Findings suggest that sufficient and secure funding for SP needs to be implemented. Services should not be required to bid for funding as with some funding pledged (Department of Health and Social Care, 2018b). Instead, as most services available to NHS patients are commissioned by CCGs, SP should also be funded in this manner to ensure that it is regarded as a reputable intervention and to secure its future. Since completion of data collection, plans have been released which state that over 1,000 trained SP link workers will work within primary healthcare by the end of 2020/21, rising further by 2023/24 (NHS England, 2019f). Thus, developing formal links between SP and healthcare, securing long-term funding, and supporting the findings of this research. However, many existing SP services are positioned outside of the NHS and funded by local authority. Clarity over whose responsibility it is to fund SP services, and where they will be positioned in the future, is needed to ensure services are consistent between localities. Furthermore, funding for the referred to VCSE services is also important. To address this, the NHS needs to work in partnership with other funding bodies, in particular local authorities, to develop a coordinated approach for the funding of those VCSE services involved in SP. This funding needs to be flexible to support locality specific needs, for example the creation of supportive services in rural locations.

It was concluded that services need to be formally linked with healthcare. Whilst many GP practices have links with SP services, it is evident that this is not consistent and, therefore, the need for improved partnership working is supported. GPs interviewed explained that they had reservations about referring their patients to a service of unknown quality and were concerned about their liability. No guidance addressing the legal responsibilities of service user care in SP, or any guidance on liability could be identified, consequently supporting the concerns raised by GPs interviewed. Policy which formally links SP with healthcare would increase the governance of such services and enable GPs to feel confident that they were referring to a reputable service. The development of quality assurance processes would support this further. New guidance released by the NHS somewhat addresses this as it integrates link workers into primary care teams (NHS England, 2019f), however, many SP services are not funded by the NHS, and, therefore, these services are not captured by the current policy. Further effort at the policy level is needed to create formal links between all SP services and healthcare.

Despite the need for a top-down approach to SP, the evidence base is insufficient to support the wide-scale implementation of the concept (Centre for Reviews and Dissemination, 2015, Rempel et

al., 2017). Consequently, effort at the policy level is not justified. However, without factors such as a consistent understanding of the concept, investment into data management and outcome measures, and adequate staffing, the evaluation of services is challenging, therefore the need for an evidence base cannot be considered independent from the other mechanisms identified. To address this, a phased approach to national implementation is recommended. This could be facilitated through the creation of test sites. In these, the mechanisms could be addressed, and the services evaluated to develop the evidence base, and determine whether SP should be implemented at a national level.

An electronic data management and referral approach is required across all SP services to support data collection, evaluation, and the development of formal links between SP and healthcare. This thesis argues for the use of a data management system across all SP services. It also argues for an electronic referral form built into the computer systems of primary care, and linked with this new data management system, to allow for the easy referral of individuals to SP. To facilitate the use of such a system, data sharing agreements need to be developed between SP and healthcare, and training needs to be provided to those responsible for data collection and analysis.

Finally, without good working relationships between healthcare and primary care, links are unlikely to thrive, therefore, GP perception and understanding is important. The use of a preparation phase before the introduction of SP services could foster a shared understanding of SP and involve healthcare professionals in the design of services to address any unforeseen barriers; this would also promote ownership of the service within primary care and hopefully lead to increased use and improved perceptions.

8.3.2 For Education

The need for increased education on SP during medical training was apparent in this research. The NHS is striving towards a holistic integrated system, advocating for SP to address non-medical needs. Yet many GPs reported that they had not studied SP during their training. Medical education needs to be updated to align with the new type of care that the NHS is striving towards. It should be reviewed to incorporate increased focus on holistic and person-centred methods of care and the wider determinants of health. However, due to junior medical staff being trained by senior staff, simply updating the medical curriculum may not be sufficient. Training for qualified healthcare staff is also required; this could be implemented during the preparation phase for SP services as advocated for in this thesis. Moreover, increased placement lengths during training with non-medical, or VCSE, organisations, such as SP services, would ensure students have a comprehensive understanding of SP's position in healthcare and the value of the VCSE sector.

8.3.3 *For Future Research*

There are gaps in this research's findings which require further examination. There are stakeholders involved in the wider processes surrounding SP which were not included in this research. For example, findings indicate that SP services need to be funded on a long-term basis, however, the views of those who make funding decisions were not included. Future research should examine the views of this group to understand the factors which impact on funding decisions. Additionally, through conversations with link workers, it became apparent that, even though GPs are the primary referrers to SP services, they are not the only healthcare professionals who can refer. Others such as nurses and social workers also make referrals, yet the views of such professionals were not considered in the current research. Perhaps, due to their differing role, they may have different views on SP which were not captured. Furthermore, the VCSE sector was identified as an important component of SP, however the perspectives of these organisations were not gathered. Future research should investigate the experiences of VCSE organisations in the SP process, specifically the challenges they face in supporting the delivery of SP. Finally, the current research did not consider the views of those who were offered a social prescription but did not engage further. The research aimed to understand the factors which hindered SP, therefore the views of those who fail to engage would provide useful insight. Future research should consider the views of this group.

Due to SP offering a person-centred approach, experiences differ widely between service users. The current research interviewed diverse individuals accessing services for assorted reasons and in varied localities. However, by comparing the views and outcomes of different service user groups in SP, such as those accessing it for social reasons versus advice / support, it could be determined whether services are appropriately addressing each need, and where services need development can be ascertained. Future research should focus on specific groups within SP, such as those accessing services for social isolation. Furthermore, this study aimed to investigate the contributing factors to requiring a non-medical health intervention through an investigation of a service's demographic and outcome data, however, due to the poor data obtained in study I, this was not possible. Future research should examine this area further. This will facilitate the development of services to support these groups, and identify groups which are not currently being included in SP.

A review of all policy and guidance relating to SP needs to be conducted to combine recommendations previously made, and consequently determine what further support is required to implement the concept. To support this, investigation of how the mechanisms identified in this thesis interact in practice is needed to inform the development of guidance. Since completion of data collection, further guidance has been released, but it is yet to be seen what impact this will have (NHS England, 2019e, NHS England, 2020b).

The scoping review identified that there is a dearth of good quality evidence to support the implementation of SP services; this was further evidenced by the data collected for study I. Research is limited by poor methodologies and outcome measurement. Recently, NHS England produced a common outcomes framework for SP (NHS England, 2020b). However, whilst this standardises data collection, it is not prescribed for use by services, and still the issue of research design is not addressed. Rigorous research is needed to support, and justify, the implementation of SP, for example, RCTs. However, whilst RCTs are the gold standard for evaluating the effectiveness of interventions (Akobeng, 2005, Sanson-Fisher et al., 2007), and the MRC promotes the use of such methods (Craig et al., 2019), it is challenging to evaluate complex health interventions such as SP with an RCT design. In a typical RCT, individuals are randomly allocated to groups. Yet, SP targets levels other than the individual, for example, interventions might be aimed at a certain group or community (Barratt et al., 2016). Consequently, individuals in the control group may be impacted at the community level (Ukoumunne et al., 1999). To address this issue other rigorous methods of evaluating SP need to be considered, such as cluster randomised trials or stepped wedge designs (Barratt et al., 2016, Craig et al., 2019). Furthermore, the MRC advises that an assessment of cost-effectiveness should be conducted when evaluating health interventions (Craig et al., 2019). This information is useful to policy. Consequently, methods to assess the cost-effectiveness of SP need to be investigated to overcome the current perceived issues in research into this area.

8.4 Conclusion

Despite much policy and initiatives creating a supportive climate for the development of SP, there is a dearth of practical support for the implementation and evaluation of services. As a result, SP is not yet reaching its full potential, and there is insufficient evidence to support wide-scale implementation. Barriers to SP in practice were identified in this research. It was apparent that there is not a fixed list of barriers, instead, there are a set of factors that influence the implementation of SP, and these factors become barriers when not present. The identified supportive factors were presented against the domains of the RMIC (Valentijn, 2016). However, it was noted that the domains do not exist in isolation. There are complex relationships between all factors irrespective of the related domain of integration, and therefore they cannot be seen in isolation. Considering this, the factors were summarised as the following five mechanisms which support the implementation and delivery of SP: a clear definition and shared understanding, supportive context, sufficient and secure funding, IT infrastructure, and stakeholder 'buy-in'. When considered at a broad level, these mechanisms suggest that SP needs to be established as a reputable intervention with formal links to healthcare. These mechanisms can be used to inform the development of policy and guidance for SP.

To support communication and the consistent application of the concept, a new definition, developed from the literature and the findings, was introduced. This definition separates the act of a referral to a SP service from the term SP. By more tightly applying the term in this way, when the social prescription occurs is identified, and the role of link workers and healthcare professionals in the assessment of service users is highlighted. It is imperative that this tightly bound understanding of SP is used consistently and applied to practice to ensure effective communication and the consistency of services.

Future investigation should consider the perspectives of those who fund SP services, and of service users who were offered a prescription but failed to engage. Also, in general, increased research which adopts rigorous methodology needs to be conducted to improve the evidence base for SP. Finally, as there has been a recent increase in policy relating to SP which has not yet been reflected in practice, a review of policy is required to understand this and identify any further needs, specifically in the guidance offered to services. Considering the recent increased interest in SP from both an academic and policy viewpoint, research into these, and all areas discussed, would be worthwhile. The increased interest also means that the findings of this thesis are timely to support the ongoing development of SP in practice.

References

- Acocella, I. (2012) The focus groups in social research: advantages and disadvantages. *Quality and Quantity*, 46(4), pp. 1125–1136.
- AHIMA Data Quality Management Task Force (1998) Practice brief: data quality management model. *Journal of AHIMA*, 69(6), pp. 2-7.
- AHRQ (2018) *Improving Data Collection Across the Health Care System*. Rockville, MD. Available at: <https://www.ahrq.gov/research/findings/final-reports/iomracereport/reldata5.html> [Accessed 20 July 2020].
- AHW (2016) *Primary Health Care in Australia*. Sydney. Available at: <https://www.aihw.gov.au/reports/primary-health-care/primary-health-care-in-australia/contents/about-primary-health-care> [Accessed 23 April 2020].
- Akobeng, A. K. (2005) Understanding randomised controlled trials. *Archives of Disease in Childhood*, 90(8), pp. 840-844.
- Alderwick, H. A., Gottlieb, L. M., Fichtenberg, C. M. and Adler, N. E. (2018) Social prescribing in the US and England: emerging interventions to address patients' social needs. *American Journal Of Preventive Medicine*, 54(5), pp. 715-718.
- Alliance Scotland (2018) *Developing a Culture of Health: The role of signposting and social prescribing in improving health and wellbeing*. Glasgow. Available at: <https://www.alliance-scotland.org.uk/wp-content/uploads/2017/10/ALLIANCE-Developing-a-Culture-of-Health.pdf> [Accessed 5 June 2018].
- Althubaiti, A. (2016) Information bias in health research: definition, pitfalls, and adjustment methods. *Journal Of Multidisciplinary Healthcare*, 9(1), pp. 211–217.
- Alwhaibi, M., Balkhi, B., Alshammari, T. M., AlQahtani, N., Mahmoud, M. A., Almetwazi, M., Ata, S., Basyoni, M. and Alhawassi, T. (2019) Measuring the quality and completeness of medication-related information derived from hospital electronic health records database. *Saudi Pharmaceutical Journal*, 27(4), pp. 502-506.
- Andersson, J., Ahgren, B., Axelsson, S. B., Eriksson, A. and Axelsson, R. (2011) Organizational approaches to collaboration in vocational rehabilitation—an international literature review. *International Journal Of Integrated Care*, 11pp. e137.
- Andrade, C. (2018) Internal, external, and ecological validity in research design, conduct, and evaluation. *Indian Journal Of Psychological Medicine*, 40(5), pp. 498–499.
- Andrews, H., Hill, T. D. and Cockerham, W. C. (2017) Educational attainment and dietary lifestyles. In: S. Shostak, ed. *Food Systems and Health*. USA: Emerald Publishing, pp. 101 - 120.
- Anney, V. N. (2014) Ensuring the quality of the findings of qualitative research: looking at trustworthiness criteria. *Journal of Emerging Trends in Educational Research and Policy Studies*, 5(2), pp. 272-281.
- Appleton, J. V. and King, L. (2002) Journeying from the philosophical contemplation of constructivism to the methodological pragmatics of health services research. *Journal Of Advanced Nursing*, 40(6), pp. 641-648.
- Arab-Zozani, M., Pezeshki, M. Z., Khodayari-Zarnaq, R. and Janati, A. (2019) Balancing overuse and underuse in the Iranian healthcare system: a force field theory analysis. *Ethiopian Journal Of Health Sciences*, 29(2), pp. 231-238.
- Araujo de Carvalho, I., Epping-Jordan, J., Pot, A. M., Kelley, E., Toro, N., Thiyagarajan, J. A. and Beard, J. R. (2017) *Organizing Integrated Health-Care Services to Meet Older People's Needs: Bulletin of the World Health Organization*. Available at: <https://apps.who.int/iris/handle/10665/272168> [Accessed 31 March 2020].
- Archer, M., Bhaskar, R., Collier, A., Lawson, T. and Norrie, A. (1998) *Critical Realism: Essential readings*. London: Routledge.

- Arksey, H. and O'Malley, L. (2005) Scoping studies: towards a methodological framework. *International Journal of Social Research Methodology*, 8(5), pp. 19-32.
- Armstrong, R., Hall, B. J., Doyle, J. and Waters, E. (2011) 'Scoping the scope' of a cochrane review. *Journal of Public Health*, 33(1), pp. 147-150.
- Ashcroft, R., Silveira, J., Rush, B. and McKenzie, K. (2014) Incentives and disincentives for the treatment of depression and anxiety: a scoping review. *Canadian Journal of Psychiatry*, 59(7), pp. 385.
- Atkinson, P., Coffey, A., Delamont, S., Lofland, J. and Lofland, L. (2001) *Handbook of Ethnography*. London: Elsevier.
- Atkinson, P. and Silverman, D. (1997) Kundera's immortality: the interview society and the invention of the self. *Qualitative Inquiry*, 3(3), pp. 304-325.
- Attree, P., French, B., Milton, B., Povall, S., Whitehead, M. and Popay, J. (2011) The experience of community engagement for individuals: a rapid review of evidence. *Health and Social Care in the Community*, 19(3), pp. 250-260.
- Aughterson, H., Baxter, L. and Fancourt, D. (2020) Social prescribing for individuals with mental health problems: a qualitative study of barriers and enablers experienced by general practitioners. *BMC Family Practice*, 21(1), pp. 194.
- Auschra, C. (2018) Barriers to the integration of care in inter-organisational settings: A literature review. *International Journal Of Integrated Care*, 18(1), pp. 5.
- Aveling, E.-L., Martin, G., Herbert, G. and Armstrong, N. (2017) Optimising the community-based approach to healthcare improvement: comparative case studies of the clinical community model in practice. *Social Science & Medicine* (1982), 173(88), pp. 96-103.
- Bach-Mortensen, A. M., Lange, B. C. L. and Montgomery, P. (2018) Barriers and facilitators to implementing evidence-based interventions among third sector organisations: a systematic review. *Implementation Science*, 13(1), pp. 103.
- Bach-Mortensen, A. M. and Montgomery, P. (2018) What are the barriers and facilitators for third sector organisations (non-profits) to evaluate their services? A systematic review. *Systematic Reviews*, 7(1), pp. 13.
- Badger, D., Nursten, J., Williams, P. and Woodward, M. (2000) Should all literature reviews be systematic? *Evaluation and Research in Education*, 14(3-4), pp. 220-230.
- Bailey, P. (1997) Finding your way around qualitative methods in nursing research. *Journal Of Advanced Nursing*, 25(1), pp. 18-22.
- Baker, D. W., Cameron, K. A., Feinglass, J., Georgas, P., Foster, S., Pierce, D., Thompson, J. A. and Hasnain-Wynia, R. (2005) Patients' attitudes toward health care providers collecting information about their race and ethnicity. *Journal Of General Internal Medicine*, 20(10), pp. 895-900.
- Baker, D. W., R., Hasnain-Wynia, N. R., Kandula, J. A., Thompson, E. and Brown, R. (2007) Attitudes toward health care providers, collecting information about patients' race, ethnicity, and language. *Medical Care*, 45(11), pp. 1034-1042.
- Barello, S., Graffinga, G. and Vegni, E. (2012) Patient engagement as an emerging challenge for healthcare services: mapping the literature. *Nursing Research And Practice*, (2012), pp. 905934.
- Barker, I., Stevenson, A., Williamson, R. and Seeny, S. R. (2018) Self-management capability in patients with long-term conditions is associated with reduced healthcare utilisation across a whole health economy: cross-sectional analysis of electronic health records. *BMJ Quality & Safety*, 27(12), pp. 989-999.
- Barnett, K., Mercer, S. W., Norbury, M., Watt, G., Wyke, S. and Guthrie, B. (2012) Epidemiology of multimorbidity and implications for health care, research, and medical education: a cross-sectional study. *The Lancet*, 380(9836), pp. 37-43.

- Barr, V. J., Robinson, S., Marin-Link, B., Underhill, L., Dotts, A., Ravensdale, D. and Salivaras, S. (2003) The expanded chronic care model: an integration of concepts and strategies from population health promotion and the chronic care model. *Hospital Quarterly*, 7(1), pp. 73-82.
- Barratt, H., Campbell, M., Moore, L., Zwarenstein, M. and Bower, P. (2016) Randomised controlled trials of complex interventions and large-scale transformation of services. *Health Services and Delivery Research*, 4(16), pp. 2050-4357.
- Bartley, M. (2004) *Health Inequality: An introduction to theories, concepts and methods*. Cambridge: Polity Press.
- Bastiampillai, T., Jones, G. M., Furber, G., Moreau, M., Healey, D., Watson, J. and Battersby, M. (2014) The IAPT@Flinders Service: adapting the Improving Access to Psychological Therapies model to the emergency department setting in Australia. *Australasian Psychiatry: Bulletin Of Royal Australian And New Zealand College Of Psychiatrists*, 22(3), pp. 277-280.
- Baum, F. (2002) *The New Public Health*. 2nd ed. Melbourne: Oxford University Press.
- Baxter, S., Johnson, M., Chambers, D., Sutton, A., Goyder, E. and Booth, A. (2018a) The effects of integrated care: a systematic review of UK and international evidence. *BMC Health Services Research*, 1pp. 350.
- Baxter, S., Johnson, M., Chambers, D., Sutton, A., Goyder, E. and Booth, A. (2018b) Understanding new models of integrated care in developed countries: a systematic review. *Health Services and Delivery Research*, 6(29), pp. 1-132.
- Bazeley, P. and Jackson, K. (2013) *Qualitative Data Analysis With NVivo*. London: SAGE Publications.
- BBC News. (2018) *Matt Hancock: GPs should prescribe concerts and mixtapes*. Available at: <https://www.bbc.co.uk/news/entertainment-arts-46111595> [Accessed 19 March 2019].
- Begun, J. W. (2003) Health care organizations as complex adaptive systems In: S. M. Mick and M. Wyttenbach, eds. *Advances in Health Care Organization Theory*. San Francisco: Jossey-Bass, pp. 253-288
- Bell, J., Dziekan, G., Pollack, C. and Mahachai, V. (2016) Self-care in the twenty first century: A vital role for the pharmacist. *Advances In Therapy*, 33(10), pp. 1691-1703.
- Bell, M. (2020) *Social Prescribing and the Digital Landscape*. London. Available at: https://www.london.gov.uk/sites/default/files/socialprescribingdigital_landscapereport.pdf [Accessed 12 May 2020].
- Benning, T. M., Alayli-Goebbels, A. F. G., Aarts, M., Stolk, E., de Wit, G. A., Prenger, R., Braakman-Jansen, L. M. A. and Evers, S., M. A. A. (2015) Exploring outcomes to consider in economic evaluations of health promotion programs: what broader non-health outcomes matter most? *BMC Health Services*, 15(226), pp. 266–274.
- Benson, T., Sladen, J., Liles, A. and Potts, H. W. W. (2019) Personal Wellbeing Score (PWS) - a short version of ONS4: development and validation in social prescribing. *BMJ Open Quality*, 8(2), pp. e000394-e000394.
- Berenguera, A., Pons-Vigués, M., Moreno-Peral, P., March, S., Ripoll, J., Rubio-Valera, M., Pombo-Ramos, H., Asensio-Martínez, A., Bolaños-Gallardo, E., Martínez-Carazo, C., Maderuelo-Fernández, J. Á., Martínez-Andrés, M. and Pujol-Ribera, E. (2017) Beyond the consultation room: Proposals to approach health promotion in primary care according to health-care users, key community informants and primary care centre workers. *Health Expectations*, 20(5), pp. 896-910.
- Beresford, P. (2005) 'Service user': regressive or liberatory terminology? *Disability & Society*, 20(4), pp. 469-477.
- Berkman, L. F. and Glass, T. (2000) Social integration, social networks, social support, and health. In: L. F. Berkman and I. Kawachi, eds. *Social Epidemiology*. New York: Oxford University Press, pp. 137-173.
- Bertotti, M., Frostick, C., Findlay, G., Harden, A., Netuveli, G., Renton, A., Carnes, D., Sohanpal, R., Hull, S. and Hutt, P. (2015) *Shine 2014 Final Report Social Prescribing: Integrating GP and community assets for health*. London. Available at:

- <http://www.health.org.uk/sites/health/files/City%20and%20Hackney%20CCG%20final%20report.pdf> [Accessed 3 June 2019].
- Bertotti, M., Frostick, C., Hutt, P., Sohanpal, R. and Carnes, D. (2018) A realist evaluation of social prescribing: an exploration into the context and mechanisms underpinning a pathway linking primary care with the voluntary sector. *Primary Health Care Research & Development*, 19(3), pp. 232-245.
- Berwick, D. M., Nolan, T. W. and Whittington, J. (2008) The triple aim: care, health, and cost. *Health Affairs*, 27(3), pp. 759-769.
- Bhandari, A. and Wagner, T. (2006) Self-reported utilization of health care services: improving measurement and accuracy. *Medical Care Research and Review*, 63(2), pp. 217-235.
- Bhardwa, S. (2015) *Social Prescribing Pioneers*. Available at: <http://www.independentnurse.co.uk/professional-article/social-prescribing-pioneers/89126/#leaveComment> [Accessed 5 September 2018].
- Bhaskar, R. (2008) *A Realist Theory of Science*. London: Verso.
- Bhaskar, R. and Danermark, B. (2006) Metatheory, interdisciplinarity and disability research: a critical realist perspective. *Scandinavian Journal of Disability Research*, 8(4), pp. 278.
- Bickerdike, L., Booth, A., Wilson, P. M., Farley, K. and Wright, K. (2017) Social prescribing: less rhetoric and more reality. A systematic review of the evidence. *BMJ Open*, 7(4), pp. e013384-e013384.
- Bickerstaffe, S. (2016) *Towards Whole Person Care*. London. Available at: http://tenantadvisor.net/wp-content/uploads/2013/12/whole-person-care_Dec2013_11518.pdf [Accessed 25 March 2020].
- Bitsch, V. (2005) Qualitative research: a grounded theory example and evaluation criteria. *Journal of Agribusiness*, 23(1), pp. 75-91.
- Blackbaud (2014) *Data-Driven Fundraising: How not-for-profits in the UK are using data and CRM to improve fundraising and further their missions*. London, UK. Available at: <https://www.blackbaud.co.uk/document.doc?id=360> [Accessed 6 June 2018].
- Blaikie, N. (2007) *Approaches to Social Enquiry: Advancing knowledge*. 2nd ed. Cambridge: Polity Press.
- Blastock, D., Brannelly, T., Davis, A. and Howes, D. (2005) *Signposting Evaluation Report*. West Midlands: Suresearch. Available at: [https://research.birmingham.ac.uk/portal/en/publications/signposting-evaluation-report\(66ab4a0b-834d-4521-bfae-cd6f945ca7d7\).html](https://research.birmingham.ac.uk/portal/en/publications/signposting-evaluation-report(66ab4a0b-834d-4521-bfae-cd6f945ca7d7).html) [Accessed 1 April 2016].
- Blickem, C., Kennedy, A., Vassilev, I., Morris, R., Brooks, H., Jariwala, P., Blakeman, T. and Rogers, A. (2013) Linking people with long-term health conditions to healthy community activities: development of Patient-Led Assessment for Network Support (PLANS). *Health Expect*, 16(3), pp. e48-59.
- Bloor, M., Frankland, J., Thomas, M. and Robson, K. (2001) *Focus Groups in Social Research*. London: SAGE Publications.
- Bodenheimer, T., Wagner, E. H. and Grumbach, K. (2002) Improving primary care for patients with chronic illness. *Journal of the American Medical Association*, 288(14), pp. 1775-1779.
- Bolderston, A. (2012) Conducting a research interview. *Journal Of Medical Imaging And Radiation Sciences*, 43(1), pp. 66-76.
- Bombard, Y., Baker, G. R., Orlando, E., Fancott, C., Bhatia, P., Casalino, S., Onate, K., Denis, J.-L. and Pomey, M.-P. (2018) Engaging patients to improve quality of care: a systematic review. *Implementation Science*, 13(1), pp. 98.
- Bonell, C., Fletcher, A., Morton, M., Lorenc, T. and Moore, L. (2012) Realist randomised controlled trials: a new approach to evaluating complex public health interventions. *Social Science & Medicine*, 75(12), pp. 2299-2306.

- Booth, R. (2018) *GPs Could Prescribe Bingo and Dancing After English Trial's Success*. Available at: <https://www.theguardian.com/society/2018/nov/18/gps-could-prescribe-bingo-and-dancing-after-english-trials-success> [Accessed 19 March 2019].
- Boothroyd, R. I. and Fisher, E. B. (2010) Peers for progress: promoting peer support for health around the world. *Family Practice*, 27(1), pp. i62–i68.
- Boslaugh, S. (2007) *Secondary Analysis for Public Health: A practical guide*. New York, NY: Cambridge.
- Bostock, N. (2018) *GPs Could Prescribe Music to Patients Under Social Prescribing Plans*. Available at: <https://www.gponline.com/gps-prescribe-music-patients-social-prescribing-plans/article/1498075> [Accessed 19 March 2019].
- Bots, S. H., Peters, S. A. E. and Woodward, M. (2017) Sex differences in coronary heart disease and stroke mortality: a global assessment of the effect of ageing between 1980 and 2010. *BMJ Global Health*, 2(2), pp. e000298.
- Bowden, L., Long, T. and Henry, H. (2019) Evaluation of a choir as a non-medical intervention for children with asthma: BreathStars. *Comprehensive Child And Adolescent Nursing*, 43(2), pp. 128-141.
- Bower, P., Campbell, S., Bojke, C. and Sibbald, B. (2003) Team structure, team climate and the quality of care in primary care: an observational study. *BMJ Quality & Safety*, 12(4), pp. 273-279.
- Bowers, B., Cohen, L. W., Elliot, A. E., Grabowski, D. C., Fishman, N. W., Sharkey, S. S., Zimmerman, S., Horn, S. D. and Kemper, P. (2013) Creating and supporting a mixed methods health services research team. *Health Services Research*, 48(6), pp. 2157–2180.
- Bowling, A. (2014) *Research Methods in Health: Investigating health and health studies*. 4th ed. Berkshire: Open University Press.
- Boyatzis, R. E. (1998) *Transforming Qualitative Information: Thematic analysis and code development*. Thousand Oaks: Sage.
- Brady, T. J., Murphy, L., O'Colmain, B. J., Beauchesne, D., Daniels, B., Greenberg, M., House, M. and Chervin, D. (2013) A meta-analysis of health status, health behaviors, and healthcare utilization outcomes of the chronic disease self-management program. *Preventing Chronic Disease*, 10pp. 120112.
- Bramwell, D., Peckham, S., Allen, P. and Checkland, K. (2015) How can GPs and community health services work more effectively together? *British Journal of General Practice*, 65(636), pp. 374-375.
- Brandling, J. and House, W. (2007) *Investigation into the Feasibility of a Social Prescribing Service in Primary Care: A pilot project*. Bath. Available at: <http://opus.bath.ac.uk/22487/> [Accessed 24 November 2016].
- Brandling, J. and House, W. (2009) Social prescribing in general practice: adding meaning to medicine. *British Journal of General Practice*, 59(563), pp. 454-456.
- Brandling, J., House, W., Howitt, D. and A., S. (2011) *New Routes: Pilot research project of a new social prescribing service provided in Keynsham*. Bristol. Available at: https://scholar.google.com/scholar_lookup?title=%E2%80%9CNew%20routes%E2%80%9D%3A%20pilot%20research%20project%20of%20a%20new%20social%20prescribing%20service%20provided%20in%20Keynsham&author=J.%20Brandling&author=W.%20House&author=D.%20Howitt&author=A.%20Sansom&publication_year=2011 [Accessed 18 November 2018].
- Braun, V. and Clarke, V. (2006) Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), pp. 77-101.
- Braun, V. and Clarke, V. (2013) *Successful Qualitative Research: A practical guide for beginners*. London: Sage.
- Braun, V. and Clarke, V. (2019a) Reflecting on reflexive thematic analysis. *Qualitative Research in Sport, Exercise and Health*, 11(4), pp. 589-597.

- Braun, V. and Clarke, V. (2019b) To saturate or not to saturate? Questioning data saturation as a useful concept for thematic analysis and sample-size rationales. *Qualitative Research in Sport, Exercise and Health*, 13(2), pp. 201-216.
- Braun, V., Clarke, V. and Weate, P. (2016) Using thematic analysis in sport and exercise research. In: B. Smith and C. Sparkes, eds. *Routledge Handbook of Qualitative Research in Sport and Exercise*. London: Routledge, pp. 191-205.
- Braveman, P. and Gottlieb, L. (2014) The social determinants of health: It's time to consider the causes of the causes. *Public Health Reports*, 129(Suppl 2), pp. 19–31.
- Brennan, N., Barnes, R., Calnan, M., Corrigan, O., SDieppe, P. and Entwistle, V. (2013) Trust in the health-care provider-patient relationship: a systematic mapping review of the evidence base. *International Journal for Quality in Health Care*, 25(6), pp. 682–688.
- Briggs, C. L. (1986) *Learning How to Ask: A sociolinguistic appraisal of the role of the interview in social science research*. 1 ed. Cambridge: Cambridge University Press.
- British Columbia Ministry of Health (2011) *Self-Management Support: A healthcare intervention*. Victoria, BC. Available at: <https://docplayer.net/4751782-Self-management-support-a-health-care-intervention-bc-ministry-of-health.html> [Accessed 23 April 2020].
- British Medical Association (2019) *Social Prescribing: Making it work for GPs and patients*. Available at: <file:///C:/Users/786843/Downloads/Social%20prescribing%20guidance.pdf>.
- Brod, M., Tesler, L. E. and Christensen, T. L. (2009) Qualitative research and content validity: developing best practices based on science and experience. *Qualitative Life Research*, 18(9), pp. 1263-1278.
- Bromley by Bow, Conexus Healthcare and London., U. o. E. (2020) *Social Prescribing Qualification*. Available at: <https://socialprescribingqualification.org.uk/> [Accessed 1 December 2020].
- Bromley by Bow Centre (2016a) *Social Prescribing at the Bromley by Bow Centre: Annual report*. Available at: http://www.bbhc.org.uk/data/files/Knowledge_HUB_SP/MEEBBB_Social_Prescribing_report_-_final_Jul_2016.pdf [Accessed 5 March 2018].
- Bromley by Bow Centre (2016b) *Social Prescribing GP Survey*. Available at: http://www.bbhc.org.uk/data/files/Knowledge_HUB_SP/MEEBBB_GP_survey_results_May_2016.pdf [Accessed 27 February 2018].
- Bromley by Bow Centre. (2018) *Bromley by Bow Centre Recruitment Pack: Social prescribing link worker Bengali/ Sylheti speaker*. Available at: http://www.bbhc.org.uk/data/files/Social_Prescribing_Link_Worker_Recruitment_Pack.pdf [Accessed 27 February 2018].
- Bromley by Bow Centre. (n.d.) *Social Prescribing: Improve your health and wellbeing - In Mile End East and Bromley by Bow*. Available at: <http://www.bbhc.org.uk/bbhc-social-prescribing> [Accessed 22 February 2018].
- Brown, L., Tucker, C. and Domokos, T. (2003) Evaluating the impact of integrated health and social care teams on older people living in the community. *Health & Social Care In The Community*, 11(2), pp. 85-94.
- Brownson, C. A., Hoerger, T. J., Fisher, E. B. and Kilpatrick, K. E. (2009) Cost-effectiveness of diabetes self-management programs in community primary care settings. *The Diabetes Educator*, 35(5), pp. 761–769.
- Brunner, E. and Marmot, M. G. (2006) Social organization, stress, and health. In: M. G. Marmot and R. G. Wilkinson, eds. *Social Determinants of Health*. Oxford: Oxford University Press, pp. 6-30.
- Brydges, M., Spearen, C., Birze, A. and Tavares, W. (2015) A culture in transition: paramedic experiences with community referral programs. *CJEM: Canadian Journal of Emergency Medicine*, 17(6), pp. 631-638.
- Bryman, A. (2015) *Social Research Methods*. 5th ed. Oxford: Oxford University Press.
- Bryman, A. and Bell, E. (2015) *Business Research Methods*. 4th ed. Oxford: Oxford University Press.

- Buck, D. (2016) *Gardens and Health: Implications for policy and practice*. Available at: https://www.kingsfund.org.uk/sites/default/files/field/field_publication_file/Gardens_and_health.pdf.
- Buck, D., Baylis, A., Dougall, D. and Robertson, R. (2018) *A Vision for Population Health: Towards a healthier future*. London. Available at: <https://www.kingsfund.org.uk/sites/default/files/2018-11/A%20vision%20for%20population%20health%20online%20version.pdf> [Accessed 8 April 2020].
- Burkitt, R., Duxbury, K., Evans, H., Ewbank, L., Gregory, F., Hall, S., Wellings, D. and Wenzel, L. (2018) *The Public and the NHS: What's the deal?* London. Available at: https://www.kingsfund.org.uk/sites/default/files/2018-06/The_public_and_the_NHS_report_0.pdf [Accessed 3 July 2019].
- Busfield, J. (2010) A pill for every ill: explaining the expansions in medicine use. *Social Science and Medicine*, 70(6), pp. 934-941.
- Butalid, L., Verhaak, P. F., van Dulmen, S. and Bensing, J. M. (2014) Concerns voiced by patients and GPs' responses during psychosocial visits in primary care: a historical cross-sectional study. *BMC Family Practice*, 15(1), pp. 188.
- Byrne, A., Baldwin, A. and Harvevy, C. (2020) Whose centre is it anyway? Defining person-centred care in nursing: an integrative review. *PLoS One*, 15(3), pp. e0229923.
- Cacioppo, J. T., Hawkey, L. C. and Thisted, R. A. (2010) Perceived social isolation makes me sad: 5-year cross-lagged analyses of loneliness and depressive symptomatology in the Chicago Health, Aging, and Social Relations Study. *Psychology And Aging*, 25(2), pp. 453.
- Cacioppo, J. T., Hughes, M. E., Waite, L. J., Hawkey, L. C. and Thisted, R. A. (2006) Loneliness as a specific risk factor for depressive symptoms: cross-sectional and longitudinal analyses. *Psychology And Aging*, 21(1), pp. 140.
- Cambridge Dictionary. (2018a) *Prescribe*. Available at: <https://dictionary.cambridge.org/dictionary/english/prescribe>.
- Cambridge Dictionary. (2018b) *Refer*. Available at: <https://dictionary.cambridge.org/dictionary/english/refer-sb-sth-to-sb-sth?q=refer%2Bsb%252Fsth%2Bto%2Bsb%252Fsth>.
- Cameron, E., Mathers, J. and Parry, J. (2008) 'Health and well-being': questioning the use of health concepts in public health policy and practice. *Critical Public Health*, 18(2), pp. 225-232.
- Campbell, C. and Jovchelovitch, S. (2000) Health, community and development. *Journal of Community and Applied Social Psychology*, 10(4), pp. 255-270.
- Canadian Council on Social Determinants of Health (2015) *A Review of Frameworks on the Determinants of Health*. Available at: http://ccsdh.ca/images/uploads/Frameworks_Report_English.pdf [Accessed 12 July 2018].
- Care Quality Commission (2018) *Experts by Experience* Available at: <https://www.cqc.org.uk/about-us/jobs/experts-experience> [Accessed 18 December 2018].
- Carek, P. J., Laibstain, S. E. and Carek, S. M. (2011) Exercise for the treatment of depression and anxiety. *The International Journal of Psychiatry in Medicine*, 41(1), pp. 15-28.
- Carlsen, B. and Glenton, C. (2011) What about N? A methodological study of sample-size reporting in focus group studies. *BMC Medical Research Methodology*, 11(23), pp. 1-10.
- Carnes, D., Sohanpal, R., Frostick, C., Hull, S., Mathur, R., Netuveli, G., Tong, J., Hutt, P. and Bertotti, M. (2017) The impact of a social prescribing service on patients in primary care: a mixed methods evaluation. *BMC Health Services Research*, 17(1), pp. 835-835.
- Carnes, D., Sohanpal, R., Matthur, R., Homer, K., Hull, S., Bertotti, M., Frostick, C., Naetuveli, G., Tong, J., Findlay, G., Harden, A. and Renton, A. (2015) *City and Hackney Social Prescribing Service: Evaluation report*. London. Available at: https://www.researchgate.net/profile/Marcello_Bertotti/publication/286354138_City_and

- [Hackney Social Prescribing Service Evaluation Report/links/5667fd5008ae8905db8c5102/City-and-Hackney-Social-Prescribing-Service-Evaluation-Report.pdf](#) [Accessed 14 June 2018].
- Casas, L., Gyateng, T. and Pritchard, D. (2013) *The Power of Data: Is the charity sector ready to plug in?* London, UK. Available at: <file:///C:/Users/ID917072/Downloads/The-power-of-data.pdf> [Accessed 6 June 2018].
- Casey, D. and Murphy, K. (2009) Issues in using methodological triangulation in research. *Nurse Researcher*, 16(4), pp. 40-55.
- Castro, F. G., Kellison, J. G., Boyd, S. J. and Kopak, A. (2010) A methodology for conducting integrative mixed methods research and data analyses. *Journal of Mixed Methods Research*, 4(4), pp. 342-360.
- Cawston, P. (2011) Social prescribing in very deprived areas. *The British Journal Of General Practice*, 61(586), pp. 350-350.
- Centre for Reviews and Dissemination (2015) *Evidence to Inform the Commissioning of Social Prescribing*. Available at: https://www.york.ac.uk/media/crd/Ev%20briefing_social_prescribing.pdf [Accessed 13 October 2015].
- CentreForum (2014) *The Pursuit of Happiness: A new ambition for our mental health*. Available at: <http://www.centreforum.org/assets/pubs/the-pursuit-of-happiness.pdf> [Accessed 20 June 2016].
- Certa. (2019) *Social Prescribing*. Available at: http://www.certa.org.uk/social_prescribing [Accessed 7 May 2019].
- Chan, J. C., Sui, Y., Oldenburg, B., Zhang, Y., Chung, H. H., Goggins, W., Au, S., Brown, N., Ozaki, R., Wong, R. Y., Ko, G. T., Fisher, E. and Team, J. a. P. P. (2014) Effects of telephone-based peer support in patients with type 2 diabetes mellitus receiving integrated care: a randomized clinical trial. *JAMA International Medicine*, 174(6), pp. 972-981.
- Chandler, J., Rycroft-Malone, J., Hawkes, C. and Noyes, J. (2016) Application of simplified Complexity Theory concepts for healthcare social systems to explain the implementation of evidence into practice. *Journal Of Advanced Nursing*, 72(2), pp. 461-480.
- Charles, A., Ham, C., Baird, B., Alderwick, H. and Bennett, L. (2018) *Reimagining Community Services: Making the most of our assets*. Available at: https://www.kingsfund.org.uk/sites/default/files/2018-01/Reimagining_community_services_report.pdf [Accessed 30 March 2020].
- Chatterjee, H., Polley, M. and Clayton, G. (2018a) Social prescribing: community-based referral in public health. *Perspectives In Public Health*, 138(1), pp. 18-19.
- Chatterjee, H. J., Camic, P. M., Lockyer, B. and Thomson, L. J. M. (2018b) Non-clinical community interventions: a systematised review of social prescribing schemes. *Arts & Health: An International Journal of Research, Policy and Practice*, 10(2), pp. 97-123.
- Chawla, D. and Sondhi, N. (2011) *Research Methodology: Concepts and cases*. New Delhi: Vikas Publishing House.
- Checkland, K. (2004) National service frameworks and UK general practitioners: street-level bureaucrats at work? *Sociology Of Health & Illness*, 26(7), pp. 951 -975.
- Checkland, K., Harrison, S., McDonald, R., Grant, S., Campbell, S. and Guthrie, B. (2008) Biomedicine, holism and general medical practice: responses to the 2004 General Practitioner contract. *Sociology Of Health & Illness*, 30(5), pp. 788-803.
- Cheng, H. G. and Phillips, M. R. (2014) Secondary analysis of existing data: opportunities and implementation. *Shanghai Archives Of Psychiatry*, 26(6), pp. 371-375.
- Chiesa, M. and Hobbs, S. (2008) Making sense of social research: how useful is the Hawthorne effect? *European Journal Social Psychology*, 38(1), pp. 67-74.
- Chitson, S. and Wylie, A. (2019) The impact and potential value for medical students of implementing social prescribing projects in primary care. *Education for Primary Care*, 31(1), pp. 57-59.

- Claffey, P., Sloan, S., Soraghan, C., Boyle, G. and Robinson, D. J. (2017) Lamp in action: the feasibility of social prescribing in the medicine for the elderly outpatients. *Age And Ageing*, 46(suppl_3), pp. iii13–iii59.
- Clark, N. M., Becker, M. H., Janz, N. K., Lorig, K., Rakowski, W. and Anderson, L. (1991) Self-management of chronic disease by older adults: A review and questions for research. *Journal Of Aging And Health*, 1(3), pp. 3-27.
- Clayman, M. L., Bylund, C. L., Chewning, B. and Makoul, G. (2016) The impact of patient participation in health decisions within medical encounters: a systematic review. *Medical Decision Making*, 36(4), pp. 427-452.
- Clift, S., Cunningham, L. and Winczewska, N. (2013) *PoLLeN People, Life, Landscape and Nature: An evaluation 2012-2013*. Folkstone. Available at: https://www.bbbc.org.uk/data/files/SOIS/PoLLeN_Full_Report_2013.pdf [Accessed 14 July 2018].
- Cohen, L., Lawrence, M. and Morrison, K. (2000) *Research Methods in Education*. 5th ed. London: Routledge / Falmer.
- Cohen, L., Manion, L. and Morrison, K. (2013) *Research Methods in Education*. London: Routledge.
- Cole, A., Jones, D. and Jopling, K. (2020) *Rolling Out Social Prescribing: Understanding the experience of the voluntary, community and social enterprise sector*. Available at: <https://www.nationalvoices.org.uk/publications/our-publications/rolling-out-social-prescribing> [Accessed 21 February 2021].
- Coleman, K., Austin, B. T., Brach, C. and Wagner, E. H. (2009) Evidence on the Chronic Care Model in the new millennium. *Health Affairs*, 28(1), pp. 75–85.
- Collis, J. and Hussey, R. (2003) *Business Research: A practical guide for undergraduate and post graduate students*. London: Palgrave MacMillan.
- Colquhoun, H. L., Levac, D., O'Brien, K. K., Straus, S., Tricco, A. C., Perrier, L., Kastner, M. and Moher, D. (2014) Scoping reviews: time for clarity in definition, methods, and reporting. *Journal of Clinical Epidemiology*, 67(12), pp. 1291-1294.
- Community Action Southwark (2015) *Social Prescribing*. London. Available at: https://casouthwark.org.uk/sites/default/files/images/Social%20Prescribing%20-%20CAS%20Briefing_0.pdf [Accessed 22 November 2018].
- Community CVS (2017) *Volunteer-Led Social Prescribing: Community CVS, Blackburn & Darwen*. Available at: <https://www.england.nhs.uk/wp-content/uploads/2017/11/len-case-study-blackburn-darwen-community.pdf> [Accessed 15 June 2018].
- Connelly, J. (2000) A realist theory of health sector management. The case for critical realism. *Journal Of Management In Medicine*, 14(5/6), pp. 262-271.
- Contandriopoulos, A. P., Denis, J. L., Touati, N. and Rodriguez, C. (2003) *The Integration of Health Care: Dimensions and implementation*. Montréal. Available at: <http://nelhin.on.ca/assets/0/16/2100/3734/3736/6cab135d-87c1-45bd-88cd-2c1d5404ec9b.pdf>. [Accessed 25 March 2020].
- Cooper, M., Evans, Y. and Pybis, J. (2016) Interagency collaboration in children and young people's mental health: a systematic review of outcomes, facilitating factors and inhibiting factors. *Child: Care, Health And Development*, 42(3), pp. 325-342.
- Corben, S. and Rosen, R. (2005) *Self-Management for Long-Term Conditions: Patients' perspectives on the way ahead*. London. Available at: https://www.kingsfund.org.uk/sites/default/files/field/field_publication_file/self-management-long-term-conditions-patients-perspectives-sara-corben-rebecca-rosen-kings-fund-26-july-2005.pdf [Accessed 9 April 2020].
- Coulter, A., Entwistle, V. A., Eccles, A., Ryan, S., Shepperd, S. and Perera, R. (2015) Personalised care planning for adults with chronic or long-term health conditions. *Cochrane Database of Systematic Reviews*, 3(3), pp. CD010523.

- Coupe, N., Cotterill, S. and Peters, S. (2018) Tailoring lifestyle interventions to low socio-economic populations: a qualitative study. *BMC Public Health*, 18(1), pp. 967.
- Crabtree, L., Tinker, A. and Glaser, K. (2018) Men's sheds: the perceived health and wellbeing benefits. *Working with Older People*, 22(2), pp. 101-110.
- Craig, P., Dieppe, P., Macintyre, S., Michie, S., Nazareth, I. and Petticrew, M. (2019) *Developing and Evaluating Complex Interventions: Following considerable development in the field since 2006, MRC and NIHR have jointly commissioned an update of this guidance to be published in 2019*. London. Available at: <https://mrc.ukri.org/documents/pdf/complex-interventions-guidance/> [Accessed 4 June 2019].
- Creswell, J. W. (2003) *Research Design: Qualitative, quantitative, and mixed methods approaches*. 2nd ed. Thousand Oaks: SAGE Publications.
- Creswell, J. W. (2009) *Research Design: Qualitative, quantitative, and mixed methods approaches*. 3rd ed. California: SAGE Publications.
- Creswell, J. W. and Miller, D. L. (2000) Determining validity in qualitative inquiry. *Theory Into Practice*, 39(3), pp. 124-130.
- Creswell, J. W. and Plano Clark, V. L. (2007) *Designing and Conducting Mixed Methods Research*. London: SAGE Publications.
- Creswell, J. W. and Plano Clark, V. L. (2011) *Designing and Conducting Mixed Methods Research*. 2nd ed. Thousand Oaks: SAGE Publications.
- Creswell, J. W. and Poth, C. N. (2017) *Qualitative Inquiry and Research Design: Choosing among five approaches*: SAGE Publications.
- Crone, D. (2011) *Art Lift, Gloucestershire. Evaluation report: Executive summary*. Gloucester. Available at: [https://www.ahsw.org.uk/userfiles/GPs%20&%20PCTs%20Newsletters/GPs%20SIG%20files/University of Gloucestershire Evaluation of Art Lift Exec Summay Crone et al. 2011.pdf](https://www.ahsw.org.uk/userfiles/GPs%20&%20PCTs%20Newsletters/GPs%20SIG%20files/University%20of%20Gloucestershire%20Evaluation%20of%20Art%20Lift%20Exec%20Summary%20Crone%20et%20al.%202011.pdf) [Accessed 10 December 2018].
- Crooks, V. C., Lubben, J., Petitti, D. B., Little, D. and Chiu, V. (2008) Social network, cognitive function, and dementia incidence among elderly women. *American Journal Of Public Health*, 98(7), pp. 1221-1227.
- Cropper, S., Porter, A., Williams, G., Carlisle, S., Moore, R., Neill, M., Roberts, C. and Snooks, H. (2007) *Community Health and Wellbeing: Action research on health inequalities*. University of Bristol: Policy Press.
- Curry, N., Mundle, C., Sheil, F. and Weaks, L. (2011) *The Voluntary and Community Sector in Health: Implications of the proposed NHS reforms*. London. Available at: https://www.kingsfund.org.uk/sites/default/files/Voluntary-and-community-sector-in-health-implications-NHS-reforms-The-Kings-Fund-june-2011_0.pdf [Accessed 31 March 2020].
- Cypress, B. S. (2017) Rigor or reliability and validity in qualitative research: Perspectives, strategies, reconceptualization, and recommendations. *Dimensions of Critical Care Nursing*, 36(4), pp. 253-263.
- Dahlgren, G. and Whitehead, M. (1991) *Policies and Strategies to Promote Social Equity in Health*. Stockholm, Sweden. Available at: https://www.researchgate.net/profile/Goeran_Dahlgren/publication/5095964_Policies_and_strategies_to_promote_social_equity_in_health_Background_document_to_WHO_-_Strategy_paper_for_Europe/links/569540f808aeab58a9a4d946.pdf [Accessed 15 July 2017].
- Danermark, B., Ekstrom, M. and Karlsson, J. C. (2002) *Explaining Society: Critical realism in the social sciences*. 2nd ed. Oxford: Routledge.
- Davey-Smith, G., Chaturvedi, N., Harding, N., Nazroo, S. and Williams, R. (2000) Ethnic inequalities in health: a review of UK epidemiological evidence. *Critical Public Health*, 10(4), pp. 375-408.
- Davey, A. (2018) Social prescribing and pre-operative care. *Anaesthesia*, 73(2), pp. 256-257.

- Davies, C. R., Knuiman, M., Wright, P. and Rosenberg, M. (2014) The art of being healthy: a qualitative study to develop a thematic framework for understanding the relationship between health and the arts. *BMJ Open*, 4(4), pp. e004790-e004790.
- Dayan, M., Aroras, S., Rosen, R. and Curry, N. (2014) *Is General Practice in Crisis?* Available at: <https://www.nuffieldtrust.org.uk/resource/is-general-practice-in-crisis> [Accessed 7 March 2020].
- Dayson, C. (2017) Social prescribing 'plus': a model of asset-based collaborative innovation? *People, Place and Policy*, 11(2), pp. 90-104.
- Dayson, C. and Bashir, N. (2014) *The Social and Economic Impact of the Rotherham Social Prescribing Pilot: Summary evaluation report*. Available at: <https://www.shu.ac.uk/research/cresr/sites/shu.ac.uk/files/social-economic-impact-rotherham.pdf> [Accessed 21 October 2017].
- Dayson, C., Bashir, N., Bennett, E. and Sanderson, E. (2016) *The Rotherham Social Prescribing Service for People With Long-Term Health Conditions: Annual evaluation report*. Available at: https://www4.shu.ac.uk/research/cresr/sites/shu.ac.uk/files/rotherham-social-prescribing-annual-eval-report-2016_7.pdf [Accessed 17 October 2018].
- Dayson, C., Bashir, N. and Pearson, S. (2013) *From Dependence to Independence: Emerging lessons from the Rotherham Social Prescribing Pilot. Final report and summary*. Sheffield. Available at: <https://www4.shu.ac.uk/research/cresr/sites/shu.ac.uk/files/rotherham-social-prescribing-final.pdf> [Accessed 14 January 2018].
- Dayson, C. and Bennett, E. (2016a) *Evaluation of Doncaster Social Prescribing Service: Understanding outcomes and impact*. Sheffield. Available at: <https://www4.shu.ac.uk/research/cresr/sites/shu.ac.uk/files/eval-doncaster-social-prescribing-service.pdf> [Accessed 17 May 2018].
- Dayson, C. and Bennett, E. (2016b) *Evaluation of the Rotherham Mental Health Social Prescribing Pilot*. Sheffield Hallam University. Available at: <https://www4.shu.ac.uk/research/cresr/sites/shu.ac.uk/files/eval-rotherham-mental-health-social-prescribing.pdf> [Accessed 21 February 2017].
- Dayson, C. and Bennett, E. (2017) *Evaluation of the Rotherham Mental Health Social Prescribing Service 2015/16-2016/17*. Available at: <https://www4.shu.ac.uk/research/cresr/sites/shu.ac.uk/files/eval-rotherham-health-social-prescribing-2015-2017.pdf> [Accessed 9 November 2020].
- Dayson, C., Fraser, A. and Lowe, T. (2019) A comparative analysis of social impact bond and Conventional financing approaches to health service commissioning in England: the case of social prescribing. *Journal of Comparative Policy Analysis*, 22(2), pp. 153-169.
- Dayson, C. and Leather, D. (2018) *Evaluation of HALE Community Connectors Social Prescribing Service 2017*. Available at: <https://www4.shu.ac.uk/research/cresr/sites/shu.ac.uk/files/eval-HALE-community-connectors-social-prescribing.pdf> [Accessed 20 June 2019].
- De longh, A., Fagan, P., Fenner, J. and Kidd, L. (2015) *A Practical Guide to Self-Management Support. Key components for successful implementation*. London. Available at: <https://www.health.org.uk/publications/a-practical-guide-to-self-management-support> [Accessed 23 April 2020].
- de Silva, D. (2014) *Helping Measure Person-Centred Care*. London. Available at: <https://www.health.org.uk/sites/default/files/HelpingMeasurePersonCentredCare.pdf>.
- DeJonckheere, M. and Vaughn, L. M. (2019) Semistructured interviewing in primary care research: A balance of relationship and rigour. *Family Medicine and Community Health*, 7(2), pp. e000057.
- Delanty, G. (1997) *Social Science: Beyond constructivism and realism*. Buckingham: Open University Press.

- Denscombe, M. (2014) *The Good Research Guide: For small-scale social research projects*. 5th ed: McGraw-Hill Education.
- Dentzer, S. (2013) The 'Triple aim' goes global, and not a minute too soon. *Health Affairs*, 23(4), pp. 638.
- Denzin (1989) *The Research Act*. 3rd ed. New York: McGraw Hill.
- Denzin, N. and Lincoln, Y. (1998) Entering the field of qualitative research. In: N. Denzin and Y. Lincoln, eds. *Collecting and Interpreting Qualitative Materials*. London: SAGE Publications.
- Denzin, N. K. and Lincoln, Y. S. (2008) *Collecting and Interpreting Qualitative Materials*. London: SAGE Publications.
- Department for Communities and Local Government (2015) *The English Index of Multiple Deprivation (IMD) 2015 – Guidance*. London. Available at: [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/464430/English_Index_of_Multiple_Deprivation_2015 - Guidance.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/464430/English_Index_of_Multiple_Deprivation_2015_-_Guidance.pdf) [Accessed 21 August 2020].
- Department for Culture, M. S. (2017) *Healthy Lives*. Available at: [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/618624/20170612 - Final Healthy Lives Guidance 11 .pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/618624/20170612_-_Final_Healthy_Lives_Guidance_11_.pdf) [Accessed 31 January 2019].
- Department for Digital Culture Media & Sport (2018) *Data Protection Act 2018*. London. Available at: <https://www.gov.uk/government/collections/data-protection-act-2018> [Accessed 21 July 2020].
- Department for Work and Pensions (2014) *Labour Market Status by Ethnic Group*. London. Available at: <https://www.gov.uk/government/statistics/labour-market-status-by-ethnic-group-june-2014> [Accessed 24 August 2020].
- Department of Health (1999) *Saving Lives: Our healthier nation*. London. Available at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/265576/4386.pdf [Accessed 20 September 2016].
- Department of Health (2004) *Choosing Health: Making healthy choices easier*. London. Available at: http://webarchive.nationalarchives.gov.uk/+www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_4094550 [Accessed 8 September 2016].
- Department of Health (2006) *Our Health, Our Care, Our Say: A new direction for community services*. London. Available at: <https://www.gov.uk/government/publications/our-health-our-care-our-say-a-new-direction-for-community-services> [Accessed 8 September 2016].
- Department of Health (2008) *High Quality Care for All: NHS next stage review final report*. London. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/228836/7432.pdf [Accessed 9 April 2018].
- Department of Health (2010) *Equity and Excellence: Liberating the NHS*. London. Available at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/213823/dh_117794.pdf [Accessed 9 March 2016].
- Department of Health (2014a) *Comorbidities: A framework of principles for system-wide action*. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/307143/Comorbidities_framework.pdf [Accessed 2 November 2018].
- Department of Health (2014b) *Wellbeing – Why it Matters to Health*. London. Available at: [https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/277568/Wellbeing - why it matters to health summary of key points.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/277568/Wellbeing_-_why_it_matters_to_health_summary_of_key_points.pdf) [Accessed 30 March 2016].
- Department of Health (2015) *2010 to 2015 Government Policy: Mental health service reform*. London. Available at: <https://www.gov.uk/government/publications/2010-to-2015->

- [government-policy-mental-health-service-reform/2010-to-2015-government-policy-mental-health-service-reform](#) [Accessed 22 March 2016].
- Department of Health and Social Care (2006) *Our Health, Our Care, Our Say: A new direction for community services*. London. Available at: <https://www.gov.uk/government/publications/our-health-our-care-our-say-a-new-direction-for-community-services> [Accessed 15 April 2019].
- Department of Health and Social Care (2010) *Equity and Excellence: Liberating the NHS* London. Available at: <https://www.gov.uk/government/publications/liberating-the-nhs-white-paper> [Accessed 15 April 2019].
- Department of Health and Social Care (2018a) *The Future of Healthcare: Our vision for digital, data and technology in health and care*. Available at: <https://www.gov.uk/government/publications/the-future-of-healthcare-our-vision-for-digital-data-and-technology-in-health-and-care/the-future-of-healthcare-our-vision-for-digital-data-and-technology-in-health-and-care#cs12-main> [Accessed 12 February 2019].
- Department of Health and Social Care (2018b) *Social Prescribing Schemes to Receive Funding From the Health and Wellbeing Fund: 2018*. Available at: <https://www.gov.uk/government/publications/social-prescribing-schemes-to-be-funded-by-the-health-and-wellbeing-fund-2018/social-prescribing-schemes-to-receive-funding-from-the-health-and-wellbeing-fund-2018> [Accessed 15 May 2018].
- Dey, I. (2003) *Qualitative Data Analysis: A user friendly guide for social scientists*. London: Routledge.
- Dhindsa, K., Bhandari, M. and Sonnadara, R. R. (2018) What's holding up the big data revolution in healthcare? *BMJ*, 363(1), pp. k5357.
- DiCicco-Bloom, B. and Crabtree, B. F. (2006) The qualitative research interview. *Medical Education*, 40(4), pp. 314-321.
- Dickinson, F. M., McCauley, M., Madaj, B. and van den Broek, N. (2019) Using electronic tablets for data collection for healthcare service and maternal health assessments in low resource settings: lessons learnt. *BMC Health Services Research*, 196(1), pp. 336.
- DiMatteo, M. R., Giordani, P. J., Lepper, H. S. and Croghan, T. W. (2002) Patient adherence and medical treatment outcomes: a meta-analysis. *Medical Care*, 40(9), pp. 794–811.
- Dimsdale, J. E. (2008) Psychological stress and cardiovascular disease. *Journal Of The American College Of Cardiology*, 51(13), pp. 1237-1246.
- Dineen-Griffin, S., Garcia-Cardenas, V., Williams, K. and Benrimoj, S. I. (2019) Helping patients help themselves: a systematic review of self-management support strategies in primary health care practice. *PLoS One*, 14(8), pp. e0220116.
- Dinesen, B., Seeman, J. and Gustafsson, J. (2011) Development of a program for tele-rehabilitation of COPD patients across sectors: co-innovation in a network. *International Journal Of Integrated Care*, 11pp. e012.
- DNA Insight. (2019) *Social Prescribing: Working with vulnerable patients and members of the community to deliver significantly improved health outcomes*. Available at: <https://dnainsight.co.uk/social-prescribing/> [Accessed 7 May 2019].
- Dodge, R., Daly, A., Huyton, J. and Sanders, L. (2012) The challenge of defining wellbeing. *International Journal of Wellbeing*, 2(3), pp. 222-235.
- Doolan, D. M. and Froelicher, E. S. (2009) Using an existing data set to answer new research questions: a methodological review. *Research And Theory For Nursing Practice*, 23(3), pp. 203-215.
- Dowden, A. (2019) How social prescribing can benefit patients and prescriber. *Prescriber*, 30(4), pp. 21-24.
- Duffin, C. (2016) Assessing the benefits of social prescribing. *Cancer Nursing Practice*, 15(2), pp. 18-20.

- Dunstan, S. (2012) *General Lifestyle Survey Overview: A Report on the 2010 General Lifestyle Survey*. Newport. Available at: file:///C:/Users/ID917072/Downloads/glfreport2010_tcm77-259420.pdf [Accessed 13 February 2018].
- Durlak, J. A. and DuPre, E. P. (2008) Implementation matters: a review of research on the influence of implementation on program outcomes and the factors affecting implementation. *American Journal Of Community Psychology*, 41(3-4), pp. 327–350.
- Easton, G. (2010) Critical realism in case study research. *Industrial Marketing Management*, 39(1), pp. 118-128.
- Edgren, L. (2008) The meaning of integrated care: a systems approach. *International Journal Of Integrated Care*, 8(5), pp. 6.
- Edozien, L. (2015) Beyond biology: The biopsychosocial model and its application in obstetrics and gynaecology. *An International Journal of Obstetrics & Gynaecology*, 122(7), pp. 900–903.
- Edwards, P. K., O'Mahoney, J. and Vincent, S. (2014) *Studying Organisations Using Critical Realism: A practical guide*. Oxford: Oxford University Press.
- Edwards, R. and Holland, J. (2013) *What is Qualitative Interviewing?* London: Bloomsbury.
- Elder-Vass, D. (2004) Re-Examining Bhaskar's Three Ontological Domains: The lessons from emergence. IACR Conference, Cambridge.
- Elder-Vass, D. (2010) *The Causal Power of Social Structure*. Cambridge: Cambridge University Press.
- Elemental. (2018) *Elemental Social Prescribing Platform*. Available at: <https://elementalsoftware.co/platform/> [Accessed 28 March 2018].
- Elston, J., Gradinger, F., Asthana, S., Lilley-Woolnough, C., Wroe, S., Harman, H. and Byng, R. (2019) Does a social prescribing 'holistic' link-worker for older people with complex, multimorbidity improve well-being and frailty and reduce health and social care use and costs? A 12-month before-and-after evaluation. *Primary Health Care Research & Development*, 20pp. e135-e135.
- ERS (2013) *Newcastle Social Prescribing Project: Final report*. Newcastle upon Tyne. Available at: <http://www.healthworksnewcastle.org.uk/wp-content/plugins/downloads-manager/upload/Social%20Prescribing%20Evaluation%20Report%20August%202013%20Final.pdf> [Accessed 28 February 2018].
- Ettner, S. L. (1996) New evidence on the relationship between income and health. *Journal of Health Economics*, 15(1), pp. 67-85.
- European Parliament and Council of European Union (2016) *Regulation (EU) 2016/679*. Available at: <https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:32016R0679&from=EN> [Accessed 2 December 2019].
- Evandrou, M., Falkingham, J., Feng, Z. and Vlachantoni, A. (2016) Ethnic inequalities in limiting health and self-reported health in later life revisited. *Journal of Epidemiology and Community Health*, 70(7), pp. 653-662.
- Ewing, C. I., Cropper, S. A. and Horsburgh, T. B. (2016) Developing, implementing and evaluating integrated care models for infants, children, young people and their families. *Archives of Disease in Childhood*, 101(9), pp. 781-782.
- Exworthy, M., Powell, M. and Glasby, J. (2017) The governance of integrated health and social care in England since 2010: great expectations not met once again? *Health Policy*, 121(11), pp. 1124-1130.
- Fancourt, D., Opher, S. and de Oliveira, C. (2019a) Fixed-effects analyses of time-varying associations between hobbies and depression in a longitudinal cohort study: support for social prescribing? *Psychotherapy And Psychosomatics*, 89(1), pp. 111–113.
- Fancourt, D., Steptoe, A. and Cadar, D. (2019b) Community engagement and dementia risk: time-to-event analyses from a national cohort study. *Journal of Epidemiology and Community Health*, 74(1), pp. 71-77.
- Farenden, C., Mitchell, C., Feast, S. and Verdenicci, S. (2015) *Community Navigation in Brighton and Hove: Evaluation of a social prescribing pilot*. Brighton. Available at: <http://www.bh->

- impetus.org/wp-content/uploads/2015/12/CN-Full-Evaluation-Nov-2015.pdf [Accessed 10 December 2018].
- Fares, J., Chung, K. S. K., Passey, M., Longman, J. and Valentijn, P. P. (2019) Exploring the psychometric properties of the Rainbow Model of Integrated Care measurement tool for care providers in Australia. *BMJ Open*, 9(1), pp. e027920.
- Farre, A. and Rapley, T. (2017) The new old (and old new) medical model: four decades navigating the biomedical and psychosocial understandings of health and illness. *Healthcare*, 5(4), pp. 88.
- Faulkner, M. (2004) Supporting the psychosocial needs of patients in general practice: The role of a voluntary referral service. *Patient Education and Counselling*, 52(1), pp. 46-41.
- Fereday, J. and Muir-Cochrane, E. (2006) Demonstrating rigor using thematic analysis: a hybrid approach of inductive and deductive coding and theme development. *International Journal of Qualitative Methods*, 5(1), pp. 4.
- Ferguson, K. and Hogarth, S. (2018) *Social Prescribing in Tower Hamlets: Evaluation of borough-wide roll-out*. London. Available at: file:///C:/Users/ID917072/Downloads/Social_Prescribing_Evaluation_FINAL_FULL_REPORT_03_2018_update.pdf [Accessed 17 October 2018].
- Fidel, R. (1993) Qualitative methods in information retrieval research. *Library and Information Science Research and Theory for Nursing Practice*, 15(3), pp. 219-247.
- Fisher, B. (2014) Community development through health gain and service change - do it now! *London Journal Of Primary Care*, 6(6), pp. 154-158.
- Fleischer, S. and Grehan, M. (2016) The arts and health: moving beyond traditional medicine. *Journal of Applied Arts & Health*, 7(1), pp. 93–105.
- Florio-Ruane, S. (1991) Conversation and narrative in collaborative research. In: C. Witherell and N. Noddings, eds. *Stories Lives Tell: Narrative and Dialogue in Education*. New York: Teachers College Press, pp. 234–256.
- Forrest, C. B. (2003) Primary care gatekeeping and referrals: effective filter or failed experiment? *BMJ*, 326(7391), pp. 692-695.
- Fratiglioni, L., Paillard-Borg, S. and Winblad, B. (2004) An active and socially integrated lifestyle in late life might protect against dementia. *The Lancet Neurology*, 3(6), pp. 343-353.
- Friedli, L., Jackson, C., Abernethy, H. and Stansfield, J. (2009) *Social Prescribing for Mental Health: A guide for commissioning and delivery*. Available at: <http://www.centreforwelfarereform.org/uploads/attachment/339/social-prescribing-for-mental-health.pdf> [Accessed 3 March 2020].
- Friedli, L., Themessl-Huber, M. and Butchart, M. (2012) *Evaluation of Dundee Equally Well Sources of Support: Social prescribing in Maryfield*. Available at: <http://www.dundeepartnership.co.uk/sites/default/files/Social%20prescribing%20evaluation%20report.pdf> [Accessed 24 October 2017].
- Friedli, L. and Watson, S. (2004) *Social Prescribing for Mental Health: A guide to commissioning and delivery*. Durham. Available at: <https://www.centreforwelfarereform.org/uploads/attachment/339/social-prescribing-for-mental-health.pdf> [Accessed 8 September 2018].
- Frostick, C. and Bertotti, M. (2019) *The Frontline of Social Prescribing - How do we ensure Link Workers can work safely and effectively within primary care? Chronic Illness*. Available at: <https://repository.uel.ac.uk/item/86z84> [Accessed 7 May 2020].
- Galletta, A. (2013) *Mastering the Semi-Structured Interview and Beyond: From research design to analysis and publication*. London: NYU Press.
- Galson, S. K. (2009) Self-management programs: one way to promote healthy aging. *Public Health Reports*, 124(4), pp. 478–480.
- Galway, K., Forbes, T., Mallon, S., Santin, O., Best, P., Neff, J., Leavey, G. and Pitman, A. (2019) Adapting digital social prescribing for suicide bereavement support: the findings of a

- consultation exercise to explore the acceptability of implementing digital social prescribing within an existing postvention service. *International Journal Of Environmental Research And Public Health*, 16(22), pp. 4561.
- General Medical Council (2013) *Good Practice in Prescribing and Managing Medicines and Devices*. Available at: https://www.gmc-uk.org/-/media/documents/Prescribing_guidance.pdf_59055247.pdf [Accessed 10 October 2018].
- General Medical Council (2018) *Outcomes for Graduates*. London. Available at: https://www.gmc-uk.org/-/media/documents/dc11326-outcomes-for-graduates-2018_pdf-75040796.pdf [Accessed 21 January 2019].
- George, J. and Martin, F. (2016) *Living With Long Term Conditions: Briefing paper*. London. Available at: file:///C:/Users/786843/Downloads/Living-with-long-term-conditions.pdf [Accessed 8 April 2020].
- Gerrish, K. and Lathlean, J. (2015) *The Research Process in Nursing*. Chichester: Wiley Blackwell.
- Gerson, K. and Horowitz, R. (2002) Observations and interviewing: options and choices in qualitative research. In: T. May, ed. *Qualitative Research in Action*. London: SAGE Publications, pp. 201-224.
- Gervas, J., Perez Fernandez, M. and Starfield, B. H. (1994) Primary care, financing and gatekeeping in western Europe. *Family Practice*, 11(3), pp. 307-317.
- Ghalibaf, A. K., Nazari, E., Gholian-Aval, M., Tabesh, H. and Tara, M. (2017) Comprehensive overview of computer-based health information tailoring: a scoping review protocol. *BMJ Open*, 7(1), pp. e019215.
- Ghuri, P. N. and Gronhaug, K. (2005) *Research Methods in Business Studies: A practical guide*. Third ed. London: Pearson Education.
- Gidlow, C., Halley, L. and Crone, J. D. (2005) Attendance of exercise referral schemes in the UK: a systematic review. *Health Education Journal*, 64(2), pp. 168-186.
- Gilbert, R. M., Rawlings, A., Dixon, M., Irving, S. S. C. and Sivaprasad, S. (2018) Dietary change for macular health of older people: eating for Eye Health, a pilot community kitchens intervention. *The Lancet*, 392(S), pp. 37.
- Giles, L. C., Anstey, K. J., Walker, R. B. and Luszcz, M. A. (2012) Social networks and memory over 15 years of followup in a cohort of older Australians: results from the Australian Longitudinal Study of Ageing. *Journal Of Aging Research*, 2012(856048), pp. 1-7.
- Gill, P., Stewart, K., Treasure, E. and Chadwick, B. (2008) Methods of data collection in qualitative research: interviews and focus groups. *British Dental Journal*, 204(6), pp. 291-295.
- Gillam, S. and Levenson, R. (1999) Link workers in primary care. *BMJ*, 319(7219), pp. 1215.
- Giurca, B. C. (2018) Social prescribing student champion scheme: a novel peer-assisted-learning approach to teaching social prescribing and social determinants of health. *Education for Primary Care*, 29(5), pp. 307-309.
- Given, M., L. (2008) *The SAGE Encyclopedia of Qualitative Research Methods*. London: SAGE.
- Glaser, B. G., Strauss, A. L. and Strutzel, E. (1968) The discovery of grounded theory: strategies for qualitative research. *Nursing Research*, 17(4), pp. 364.
- Glasgow, R., Orleans, C., Wagner, E., Curry, S. and Solberg, L. (2001) Does the chronic care model also serve as a template for improving prevention? *The Milbank Quarterly*, 79(4), pp. 779-612.
- Goddard, M. and Mason, A. R. (2017) Integrated care: a pill for all ills? *International journal of health policy and management*, 6(1), pp. 1-3.
- Golafshani, N. (2003) Understanding reliability and validity in qualitative research. *The Qualitative Report*, 8(4), pp. 597-607.
- Goodwin, N. (2011) *The Five Laws of Integrated Care*. Available at: http://www.kingsfund.org.uk/blog/integrated_care_laws.html.
- Goodwin, N. (2013) Taking integrated care forward: The need for shared values. *International Journal Of Integrated Care*, 13pp. e026.

- Goodwin, N. (2016) Understanding Integrated Care. *International Journal Of Integrated Care*, 16(4), pp. 6.
- Goodwin, N. and Smith, J. (2011) *The Evidence Base for Integrated Care*. London. Available at: <https://www.kingsfund.org.uk/sites/default/files/Evidence-base-integrated-care2.pdf> [Accessed 21 April 2020].
- Goodwin, N., Smith, J., Davies, A., Rosen, R., Dixon, J., Goodwin, N. and Dixon, A. (2012) *A Report to the Department of Health and the NHS Future Forum – Integrated Care for Patients and Populations: Improving outcomes by working together*. London. Available at: <https://www.kingsfund.org.uk/publications/integrated-care-patients-and-populations-improving-outcomes-working-together> [Accessed 31 March 2020].
- Goodyear-Smith, F. and Buetow, S. (2001) Power issues in the doctor-patient relationship. *Health Care Analysis*, 9(4), pp. 449-462.
- Gottlieb, L., Cottrell, E. K., Park, B., Clark, K. D., Gold, R. and Fichtenberg, C. (2018) Advancing social prescribing with implementation science. *The Journal of the American Board of Family Medicine*, 31(3), pp. 315-321.
- Grady, P. A. and Gough, L. L. (2014) Self-management: A comprehensive approach to management of chronic conditions. *American Journal Of Public Health*, 104(8), pp. e25-e31.
- Graham, S. and Brookey, J. (2008) Do patients understand? *The Permanente Journal*, 12(3), pp. 67-69.
- Grant, C., Goodenough, T., Harvey, I. and Hine, C. (2000) A randomized controlled trial and economic evaluation of a referrals facilitator between primary care and the voluntary sector. *BMJ*, 320(7232), pp. 419-423.
- Gray, D. E. (2017) *Doing Research in the Real World*. 4th ed. University of Greenwich: SAGE Publications.
- Grayer, J., Cape, J., Orpwood, L., Leibowitz, J. and Buszewicz, M. (2008) Facilitating access to voluntary and community services for patients with psychosocial problems: A before-after evaluation. *BMC Family Practice*, 7(9), pp. 27.
- Greasley, P. and Small, N. (2005) Providing welfare advice in general practice: referrals, issues and outcomes. *Health and Social Care in the Community*, 13(3), pp. 249-258.
- Great Britain (1998) Data Protection Act. London, Stationery Office.
- Greenaway, K. H., Haslam, S. A., Cruwys, T., Branscombe, N. R., Ysseldyk, R. and Heldreth, C. (2015) From "we" to "me": Group identification enhances perceived personal control with consequences for health and well-being. *Journal of Personality and Social Psychology*, 109(1), pp. 53-74.
- Greenfield, G., Foley, K. and Majeed, A. (2016) Rethinking primary care's gatekeeper role. *BMJ*, 354(1), pp. i4803.
- Griffiths, J., Austin, L. and Luker, K. (2004) Interdisciplinary teamwork in the community rehabilitation of older adults: an example of flexible working in primary care. *Primary Health Care Research & Development*, 5(3), pp. 228-239.
- Groenewegen, P. (2016) General practitioners as gatekeepers: better health care than in countries with self-referral to specialists? *Nederlands Tijdschrift Voor Geneeskunde*, 160(25), pp. D88.
- Grooten, L., Borgermans, L. and Vrijhoef, H. (2018) An instrument to measure maturity of integrated care: a first validation study. *International Journal Of Integrated Care*, 18(1), pp. 10.
- Grudniewicz, A., Tenbenschel, T., Evans, J. M., Steele Gray, C., Baker, G. R. and Wodchis, W. P. (2018) "Complexity-Compatible" policy for integrated care? Lessons from the implementation of Ontario's Health Links. *Social Science & Medicine*, 198(95), pp. 95–102.
- Guba, E. G. (1981) Criteria for assessing the trustworthiness of naturalistic inquiries. *Educational Technology Research and Development*, 29(2), pp. 75-91.
- Guba, E. G. and Lincoln, Y. S. (1989) *Fourth Generation Evaluation*. 1st ed. London: SAGE Publications.

- Guba, E. G. and Lincoln, Y. S. (1994) Competing paradigms in qualitative research. In: N. K. Denzin and Y. S. Lincoln, eds. *Handbok of Qualitative Research*. Thousand Oaks: SAGE Publications, pp. 105-117.
- Guest, G., MacQueen, K. M. and Namey, E. E. (2011) *Applied Thematic Analysis*. London: SAGE Publications.
- Ha, N. H. L., Chan, I., Yap, P., Nurjono, M., Vrijhoef, J. M. H., Nicholas, S. O. and Wee, S. L. (2020) Mixed-method evaluation of CARITAS: a hospital-to-community model of integrated care for dementia. *BMJ Open*, 10(1), pp. e039017.
- Ham, C., Imison, C. and South, P. (2011) *Where Next for the NHS Reforms: The case for integrated care*. London. Available at: http://www.kingsfund.org.uk/publications/articles/nhs_pause_paper.html [Accessed 30 March 2020].
- Ham, C. and Smith, J. (2010) *Removing the Policy Barriers to Integrated Care in England*. London. Available at: <http://www.nuffieldtrust.org.uk/publications/removing-policy-barriers-integrated-careengland> [Accessed 30 March 2020].
- Hamilton-West, K., Gadsby, E., Zaremba, N. and Jaswal, S. (2019) Evaluability assessments as an approach to examining social prescribing. *Health Soc Care Community*, 27(4), pp. 1085-1094.
- Hanlon, P., Gray, C. M., Chng, N. R. and Mercer, S. W. (2019) Does Self-Determination Theory help explain the impact of social prescribing? A qualitative analysis of patients' experiences of the Glasgow 'Deep-End' Community Links Worker Intervention. *Chronic Illness*, pp. 1742395319845427-1742395319845427.
- Harlock, J., Caiels, J., Marczak, J., Peters, M., Fitzpatrick, R., Wistow, G., Forder, J. and Jones, K. (2019) Challenges in integrating health and social care: the Better Care Fund in England. *Journal Of Health Services Research & Policy*, 0(0), pp. 1355819619869745.
- Harper, D. (2011) Choosing a qualitative research method. In: D. Harper and A. R. Thompson, eds. *Qualitative Research Methods in Mental Health and Psychotherapy*. London: Wiley-Blackwell, pp. 83-98.
- Harrison, N. (2014) *Peer-to-Peer Support for Social Prescribing*. Available at: <https://www.movingforward-northeast.co.uk/wp-content/uploads/2015/08/Social-Prescribing-Peer-Support-FINAL-27-10-14.pdf> [Accessed 15 June 2018].
- Harrison, R. A., McNair, M. and Dugdill, L. (2005) Access to exercise referral schemes - a population based analysis. *Journal of Public Health*, 27(326-330), pp.
- Hartwig, M. (2007) *Dictionary of Critical Realism*. Abingdon: Routledge.
- Harvey, M. and Land, L. (2017) *Research Methods for Nurses and Midwives: Theory and practice*. London: SAGE Publications.
- Haslam, C., Jetten, J., Cruwys, T., Dingle, G. S. and Haslam, A. (2018) *The new psychology of health: Unlocking the social cure*. London: Routledge.
- Hasnain-Wynia, R. and Baker, D. W. (2006) Obtaining data on patient race, ethnicity, and primary language in health care organizations: Current challenges and proposed solutions. *Health Services Research*, 41(4 Pt 1), pp. 1501-1518.
- Hasnain-Wynia, R., Pierce, D. and Pittman, M. (2004) *Who, When, and How: The current state of race, ethnicity, and primary language data collection in hospitals*. New York. Available at: <http://www.commonwealthfund.org/publications/fund-reports/2004/may/who--when--and-how--the-current-state-of-race--ethnicity--and-primary-language-data-collection-in-ho> [Accessed 15 May 2018].
- Hasnain-Wynia, R., Van Dyke, K., Youdelman, M., Krautkramer, C., Ivey, S. L., Gilchick, R., Kaleba, E. and Wynia, M. K. (2010) Barriers to collecting patient race, ethnicity, and primary language data in physician practices: An exploratory study. *Journal Of The National Medical Association*, 102(9), pp. 769-775.
- Hassan, S. M., Giebel, C., Morasae, E. K., Rotheram, C., Mathieson, V., Ward, D., Reynolds, V., Price, A., Bristow, K. and Kullu, C. (2020) Social prescribing for people with mental health needs

- living in disadvantaged communities: the Life Rooms model. *BMC Health Services Research*, 20(1), pp. 19.
- Haupt, J. (2016) *Applying Complexity Science to Health and Healthcare*. Minneapolis. Available at: <https://amee.org/getattachment/AMEE-Initiatives/ESME-Courses/AMEE-ESME-Online-Courses/Leadership-Online/ESME-LME-Resources/Applying-Complexity-Science-to-Health-and-Healthcare.pdf> [Accessed 12 June 2020].
- Hawe, P., Shiell, A. and Riley, T. (2009) Theorising interventions as events in systems. *American Journal Of Community Psychology*, 43(3), pp. 267-276.
- Hay, C. (2002) *Political Analysis: A critical introduction*. Basingstoke: Palgrave.
- Heale, R. and Twycross, A. (2015) Validity and reliability in quantitative studies. *Evidenced-Based Nursing*, 18(3), pp. 66-67.
- Health and Social Care Act (2012) Health and Social Care Act (c. 7). In S. Office ed. London.
- Health Exchange. (2017) *Health Exchange*. Available at: <https://www.healthexchange.org.uk/> [Accessed 2 March 2017].
- Health Services England (2015) *Donegal Social Prescribing for Health & Wellbeing: Evaluation report*. Available at: <https://www.hse.ie/eng/services/list/4/mental-health-services/nosp/research/reports> [Accessed 11 June 2018].
- Healthy London Partnership (2018) *A Guide for Commissioners – Unlocking the value of VCSE organisations for improving populations health & wellbeing*. London. Available at: <https://www.healthylondon.org/wp-content/uploads/2017/10/Unlocking-the-value-of-VCSE-organisations-for-improving-population-health-and-wellbeing.pdf> [Accessed 3 July 2019].
- Healthwatch Shropshire (2019) *Exploring Barriers of Social Prescribing*. Shropshire. Available at: https://www.healthwatch.co.uk/sites/healthwatch.co.uk/files/reports-library/20190515_Shropshire_Social%20Prescribing%20Exploring%20Barriers%20Engagement%20Report.pdf [Accessed 10 November 2020].
- Healthy Dialogues (2018) *Evaluation of the East Merton Social Prescribing Pilot* Available at: <https://www.mertonccg.nhs.uk/News-Publications/PublishingImages/Pages/Publications/Social%20Prescribing%20Report.pdf> [Accessed 2 July 2017].
- Heijnders, M. L. and Meijs, J. J. (2018) 'Welzijn op Recept' (Social Prescribing): a helping hand in re-establishing social contacts - an explorative qualitative study. *Primary Health Care Research & Development*, 19(3), pp. 223-231.
- Heikkinen, R. L. and Kauppinen, M. (2004) Depressive symptoms in late life: a 10-year follow-up. *Archives Of Gerontology And Geriatrics*, 38(3), pp. 239-250.
- Heinrich, L., M and Gullone, E. (2006) The clinical significance of loneliness: a literature review. *Clinical Psychology Review*, 26(6), pp. 695-718.
- Helgeson, V. S., Cohen, S. and Fritz, H. L. (1998) Social ties and cancer. In: J. C. Holland and W. Breitbart, eds. *Psycho-Oncology*. New York: Oxford University Press, pp. 99–109.
- Hiscock, R., Judge, K. and Bauld, L. (2011) Social inequalities in quitting smoking: what factors mediate the relationship between socioeconomic position and smoking cessation? *Journal of Public Health*, 33(1), pp. 39-47.
- HM Government (2011) *No Health Without Mental Health: Delivering better mental health outcomes for people of all ages* London. Available at: <https://www.gov.uk/government/publications/delivering-better-mental-health-outcomes-for-people-of-all-ages> [Accessed 17 November 2020].
- HM Government (2018) *A Connected Society: A strategy for tackling loneliness – Laying the foundations for change*. London. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/750909/6.4882_DCMS_Loneliness_Strategy_web_Update.pdf [Accessed 24 October 2018].

- Hoey, L. M., Ieropoli, S. C., White, V. M. and Jefford, M. (2008) Systematic review of peer-support programs for people with cancer. *Patient Education And Counseling*, 70(3), pp. 315-337.
- Holder, H., Robertson, R., Ross, S., Bennett, L., Gosling, J. and Curry, N. (2015) *Risk or Reward? The changing role of CCGs in general practice*. London. Available at: <https://www.nuffieldtrust.org.uk/files/2017-01/nt-ccgs-one-year-on-report-web-final.pdf> [Accessed 2 March 2017].
- Holland, J. H. (1992) *Adaptation in Natural and Artificial Systems: An introductory analysis with applications to biology, control, and artificial intelligence*. Cambridge: MIT Press.
- Holland, J. H. (2006) Studying Complex Adaptive Systems. *Journal of Systems Science and Complexity*, 19(1), pp. 1-8.
- Holt-Lunstad, J., Smith, T. B. and Layton, J. B. (2010) Social relationships and mortality risk: a meta-analytic review. *Plos Medicine*, 7(7), pp. e1000316.
- Holt, A. (2010) Using the telephone for narrative interviewing: a research note. *Qualitative Research*, 10(1), pp. 113-121.
- Holtzman, R. E., Rebok, G. W., Saczynski, J. S., Kouzis, A. C., Wilcox-Doyle, K. and Eaton, W. W. (2004) Social network characteristics and cognition in middle-aged and older adults. *The Journals Of Gerontology. Series B, Psychological Sciences And Social Sciences*, 59(6), pp. 278-P284.
- Homeless Link (2014) *The Unhealthy State of Homelessness: Health audit results 2014*. London. Available at: <https://www.homeless.org.uk/sites/default/files/site-attachments/The%20unhealthy%20state%20of%20homelessness%20FINAL.pdf> [Accessed 30 January 2018].
- House, J. S., Landis, K. R. and Umberson, D. (1988) Social relationships and health. *Science*, 241(4865), pp. 540-545.
- Houston, S. (2001) Beyond social constructionism: critical realism and social work. *British Journal of Social Work*, 31(6), pp. 845-861.
- Howarth, M., Rogers, M., Withnell, N. and McQuarrie, C. (2018) Growing spaces: an evaluation of the mental health recovery programme using mixed methods. *Journal of Research in Nursing*, 23(6), pp. 476-489.
- Howe, K. R. (1988) Against the qualitative-quantitative incompatibility thesis or dogmas die hard. *Educational Researcher*, 17(8), pp. 10-16.
- Huijts, T., Gkiouleka, A., Reibling, N., Thomson, K. H., Eikemo, T. A. and Bambra, C. (2017) Educational inequalities in risky health behaviours in 21 European countries: Findings from the European social survey (2014) special module on the social determinants of health. *European Journal of Public Health*, 1(27), pp. 63-72.
- Humphries, R. (2015) Integrated health and social care in England – progress and prospects. *Health Policy*, 119(7), pp. 856-859.
- Hurrell, S. A., Edwards, P. K., O'Mahoney, J. and Vincent, S. (2014) Critical realism and mixed methods research: combining the extensive and intensive at multiple levels. *Studying Organizations Using Critical Realism: A Practical Guide*. Oxford: Oxford University Press, pp. 241-263.
- Husk, K. (2017) *Kerryn Husk: Social Prescribing offers huge potential but requires a nuanced evidence base*. Available at: <https://blogs.bmj.com/bmj/2017/07/18/social-prescribing-offers-huge-potential-but-requires-a-nuanced-evidence-base/> [Accessed 18 December 2018].
- Husk, K., Blockley, K., Lovell, R., Bethel, A., Bloomfield, D., Warber, S., Pearson, M., Lang, I., Byng, R. and Garside, R. (2016) What approaches to social prescribing work, for whom, and in what circumstances? A protocol for a realist review. *Syst Rev*, 5pp. 93.
- Husk, K., Elston, J., Gradinger, F., Callaghan, L. and Asthana, S. (2019) Social prescribing: where is the evidence? *British Journal of General Practice*, 68(678), pp. 6-7.
- Iacobucci, G. (2017) NHS in 2017: keeping pace with society *BMJ*, 356(5), pp. i6738.
- Ibrahim, N., Thompson, D., Nixdorf, R., Kalha, J., Mpango, R., Moran, G., Mueller-Stierlin, A., Ryan, G., Mahlke, C. and Shamba, D. (2020) A systematic review of influences on implementation

- of peer support work for adults with mental health problems. *Social Psychiatry and Psychiatric Epidemiology*, 55(3), pp. 285-293.
- Iqbal, G., Johnson, M. R., Szczepura, A., Gumber, A., Wilson, S. and Dunn, J. A. (2012a) Ethnicity data collection in the UK: the healthcare professional's perspective. *Diversity and Equality in Health and Care*, 9(4), pp. 281-290.
- Iqbal, G., Johnson, M. R., Szczepura, A., Wilson, S., Gumber, A. and Dunn, J. A. (2012b) UK ethnicity data collection for healthcare statistics: The South Asian perspective. *BMC Public Health*, 12(1), pp. 243.
- Irvine, A. (2011) Duration, dominance and depth in telephone and face-to-face interviews: a comparative exploration. *International Journal of Qualitative Methods*, 10(3), pp. 202-220.
- Ismail, N. (2017) Why is it difficult to evaluate the effectiveness and cost-effectiveness of complex public health interventions in the community? A health economics perspective. *Perspectives In Public Health*, 137(4), pp. 206-207.
- Jamshed, S. (2014) Qualitative research method-interviewing and observation. *Journal of Basic and Clinical Pharmacy*, 5(4), pp. 87-88.
- Janamian, J., Crossland, L. and Wells, L. (2016) On the road to value co-creation in health care: the role of consumers in defining the destination, planning the journey and sharing the drive. *Medical Journal of Australia*, 204(7), pp. S12.
- Janßen, C., Sauter, S. and Kowalski, C. (2012) The influence of social determinants on the use of prevention and health promotion services: results of a systematic literature review. *Psychosocial Medicine*, 9(1), pp. Doc07.
- Jensen, A., Stickley, T., Torrissen, W. and Stigmar, K. (2017) Arts on prescription in Scandinavia: a review of current practice and future possibilities. *Perspectives In Public Health*, 137(5), pp. 268-274.
- Jensen, R. E., Chan, K. S., Weiner, J. P., Fowles, J. B. and Neale, S. M. (2009) Implementing electronic health record-based quality measures for developmental screening. *Pediatrics*, 124(4), pp. e648-654.
- Johnson, N. and Ross, L. (2011) *Social Prescribing Within the North East: Current programmes and challenges for the future*. Newcastle. Available at: www.equalarts.org.uk/media/Social%20Prescribing_FINAL.doc [Accessed 1 November 2018].
- Johnson, P., Wistow, G., Schulz, R. and Hardy, B. (2003) Interagency and interprofessional collaboration in community care: the interdependence of structures and values. *Journal Of Interprofessional Care*, 17(1), pp. 69-83.
- Johnson, R. B. and Onwuegbuzie, A. J. (2004) Mixed methods research: a research paradigm whose time has come. *Educational Researcher*, 33(7), pp. 14-26.
- Johnson, S. (2015) *NHS Leeds West Clinical Commissioning Group Patient Empowerment Project (PEP): Final year one report*. Bradford. Available at: <https://www.leedscg.nhs.uk/content/uploads/2018/05/Patient-Empowerment-Project-Leeds-West-Final-Report.pdf> [Accessed 10 December 2018].
- Johnston, M. P. (2014) Secondary data analysis: a method of which the time has come. *Qualitative and Quantitative Methods in Libraries*, 3(3), pp. 619-626.
- Johnston, O., Kumar, S., Kendall, K., Peveler, R., Gabbay, J. & Kendrick, T. (2007). Qualitative study of depression management in primary care: GP and patient goals, and the value of listening. *British Journal of General Practice*, 57, 873-879. (2007) Qualitative study of depression management in primary care: GP and patient goals, and the value of listening. *British Journal of General Practice*, 57(544), pp. 873-879.
- Jordan, K., Porcheret, M. and Croft, P. (2004) Quality of morbidity coding in general practice computerized medical records: a systematic review. *Family Practice*, 21(4), pp. 396-412.

- Jorgensen, S., Thorlby, R., Weinick, R. M. and Ayanian, J. Z. (2010) Responses of Massachusetts hospitals to a state mandate to collect race, ethnicity and language data from patients: A qualitative study. *Health Services Research*, 10(1), pp. 352.
- Juni, P., Altman, D. G. and Egger, M. (2001) Assessing the quality of randomized controlled trials. In: M. Egger, G. D. Smith and D. G. Altman, eds. *Systematic Reviews in Health Care: Meta-analysis in Context*. London: BMJ Publishing Group, pp. 87–108.
- Kallio, H., Pietilä, A.-M., Johnson, M. and Kangasniemi, M. (2016) Systematic methodological review: Developing a framework for a qualitative semi-structured interview guide. *Journal Of Advanced Nursing*, 72(12), pp. 2954-2965.
- Kandola, D., Banner, D., O'Keefe-McCarthy, S. and Jassal, D. (2014) Sampling methods in cardiovascular nursing research: An overview. *Canadian Journal of Cardiovascular Nursing*, 24(3), pp. 15–18.
- Kandula, N. R., Hasnain-Wynia, R., Thompson, J. A., Brown, E. R. and Baker, D. W. (2009) Association between prior experiences of discrimination and patients' attitudes towards health care providers collecting information about race and ethnicity. *Journal Of General Internal Medicine*, 24(7), pp. 789-794.
- Kara, H. (2017) *Research and Evaluation for Busy Students and Practitioners: A time saving guide*: Policy Press.
- Kawachi, I. and Kennedy, B. P. (1999) Income inequality and health: Pathways and mechanisms. *Health Services Research*, 34(1 Pt 2), pp. 215.
- Kazmer, M. M. and Xie, B. (2008) Qualitative interviewing in internet studies: Playing with the media, playing with the method. *Information, Community and Society*, 11(2), pp. 257-278.
- Keenaghan, C., Sweeney, J. and McGowan, B. (2012) *Care Options for Primary Care: The development of best practice information and guidance on social prescribing for primary care teams*. Dublin. Available at: <https://www.drugsandalcohol.ie/18852/> [Accessed 20 November 2018].
- Kellezi, B., Wakefield, J. R. H., Stevenson, C., McNamara, N., Mair, E., Bowe, M., Wilson, I. and Halder, M. M. (2019) The social cure of social prescribing: a mixed-methods study on the benefits of social connectedness on quality and effectiveness of care provision. *BMJ Open*, 9(11), pp. e033137-e033137.
- Kennedy, B. M., Rehman, M., Johnson, W. D., Magee, M. B., Leonard, R. and Katzmarzyk, P. T. (2017) Healthcare Providers versus Patients' Understanding of Health Beliefs and Values. *Patient Experience Journal*, 4(3), pp. 29-37.
- Kennen, E. M., Davis, T. C., Huang, J., Yu, H., Carden, D., Bass, R. and Arnold, C. (2005) Tipping the scales: The effect of literacy on obese patients' knowledge and readiness to lose weight *Southern Medical Journal*, 98(1), pp. 15-18.
- Kiecolt, K. J. and Nathan, L. E. (1985) *Quantitative Applications in the Social Sciences: Secondary analysis of survey data* London: SAGE Publications.
- Kilgarriff-Foster, A. and O'Cathain, A. (2015) Exploring the components and impact of social prescribing. *Journal of Public Mental Health*, 14(3), pp. 127-134.
- Kilgore, C., Richter, R. R., Siler, W. L. and Sayre-Stanhope, D. (2008) Psychosocial issues in primary care physician assistant practice: a descriptive study. *The Journal of Physician Assistant Education*, 19(4), pp. 4-13.
- Killingback, C., Tsofliou, F. and Clark, C. (2017) Older people's adherence to community-based group exercise programmes: a multiple-case study. *BMC Public Health*, 17(1), pp. 115.
- Kilpatrick, S., Cheers, B., Gilles, M. and Taylor, J. (2009) Boundary crossers, communities, and health: exploring the role of rural health professionals. *Health & Place*, 15(1), pp. 284-290.
- Kimberlee, R. (2013) *Developing a Social Prescribing Approach for Bristol*. Bristol. Available at: <https://uwe-repository.worktribe.com/output/927254> [Accessed 2 August 2016].
- Kimberlee, R. (2015a) What is social prescribing? *Advances in Social Sciences Research Journal*, 2(1), pp. 102-110.

- Kimberlee, R. (2015b) What is the value of social prescribing? *Advances in Social Sciences Research Journal*, 2(1), pp. 102-110.
- Kimberlee, R. (2016) *Gloucestershire Clinical Commissioning Group Social Prescribing Service: Evaluation report*. Available at: <http://www.glosvcsalliance.org.uk/wp-content/uploads/2017/02/Social-prescribing-Evaluation-report-FINAL-201216.pdf> [Accessed 17 May 2018].
- Kimberlee, R., Polley, M., Bertotti, M., Pilkington, K. and Refsum, C. (2017) A review of the evidence assessing impact of social prescribing on healthcare demand and cost implications. pp.
- Kimberlee, R., Ward, R., Jones, M. and Powell, J. (2014a) *Measuring the Economic Impact of Wellspring Healthy Living Centre's Social Prescribing Wellbeing Programme for Low Level Mental Health Issues Encountered by GP Services*. Available at: [http://www.wellspringhlc.org/content/POV%20Final%20Report%20March%202014%20\(2\).pdf](http://www.wellspringhlc.org/content/POV%20Final%20Report%20March%202014%20(2).pdf) [Accessed 23 November 2016].
- Kimberlee, R., Ward, R., Jones, M. and Powell, J. (2014b) *Proving our Value: Measuring the economic impact of wellspring healthy living centre's social prescribing wellbeing programme for low level mental health issues encountered by GP services*. Bristol. Available at: http://www.wellspringhlc.org.uk/reports/SWFProvingOurValue_UWE_Wellspring.pdf [Accessed 2 January 2018].
- Kingston, A., Robinson, L., Booth, H., Knapp, M. and Jagger, C. (2018) Projections of multi-morbidity in the older population in England to 2035: Estimates from the Population Ageing and Care Simulation (PACSim) model. *Age Ageing*, 47(3), pp. 374-380.
- Kinsella, S. (2015) *Social Prescribing: A review of the evidence*. Wirral. Available at: http://info.wirral.nhs.uk/document_uploads/evidence-reviews/Social%20Prescribing%20literature%20review%20v5.pdf [Accessed 13 October 2015].
- Kirst, M., Shankardass, K., Bomze, S., Lofters, A. and Quinonez, C. (2013) Sociodemographic data collection for health equity measurement: A mixed methods study examining public opinions. *International Journal For Equity In Health*, 12(1), pp. 75.
- Kivimäki, M., Leino-Arjas, P., Luukkonen, R., Riihimäi, H., Vahtera, J. and Kirjonen, J. (2002) Work stress and risk of cardiovascular mortality: prospective cohort study of industrial employees. *BMJ*, 325(7369), pp. 857.
- Koch, T. and Harrington, A. (1998) Reconceptualising rigour: the case for reflexivity. *Journal Of Advanced Nursing*, 28(4), pp. 882-890.
- Kodish, S. and Gittelsohn, J. (2011) Systematic data analysis in qualitative health research: Building credible and clear findings. *Sight and Life*, 25(2), pp. 52-56.
- Kodner, D. L. (2009) All together now: A conceptual exploration of integrated care. *Healthcare quarterly*, 13(Special Issue), pp. 6-15.
- Kodner, D. L. and Spreeuwenberg, C. (2002) Integrated care: Meaning, logic, applications, and implications - A discussion paper. *International Journal Of Integrated Care*, 14(2), pp. e12.
- Koeck, C. (2014) Imbalance of power between patients and doctors. *BMJ*, 349(1), pp. g7485.
- Köpcke, F., Trinczek, B., Majeed, R. W., Schreiweis, B., Wenk, J., Leusch, T., Ganslandt, T., Ohmann, C., Bergh, B., Röhrig, R., Dugas, M. and Prokosch, H.-U. (2013) Evaluation of data completeness in the electronic health record for the purpose of patient recruitment into clinical trials: a retrospective analysis of element presence. *BMC Medical Informatics And Decision Making*, 13(1), pp. 37.
- Kozłowska, O., Lumb, A., Tan, G. D. and Rea, R. (2018) Barriers and facilitators to integrating primary and specialist healthcare in the United Kingdom: a narrative literature review. *Future Healthcare Journal*, 5(1), pp. 64-80.
- Krista, B. A., Edenfield, T. M. and Blumenthal, J. A. (2007) Exercise as a treatment for depression and other psychiatric disorders: a review. *Journal of Cardiopulmonary Rehabilitation & Prevention*, 27(6), pp. 359-367.

- Kroenke, C. H., Kubzansky, L. D., Schernhammer, E. S., Holmes, M. D. and Kawachi, I. (2006) Social networks, social support, and survival after breast cancer diagnosis. *Journal of Clinical Oncology*, 24(7), pp. 1105-1111.
- Kroenke, C. H., Michael, Y. L., Poole, E. M., Kwan, M. L., Nechuta, S., Leas, E., Caan, B. J., Pierce, J., Shu, X. O., Zheng, Y. and Chen, W. Y. (2017) Postdiagnosis social networks and breast cancer mortality in the After Breast Cancer Pooling Project. *Cancer*, 123(7), pp. 1228-1237.
- Krska, J., Palmer, S., Dalzell-Brown, A. and Nicholl, P. (2013) Evaluation of welfare advice in primary care: effect on practice workload and prescribing for mental health. *Primary Health Care Research & Development*, 14(3), pp. 307-314.
- Krueger, K. R. and Casey, M. A. (2000) *Focus Groups: A practical guide for applied research*. 3rd ed. Thousand Oaks: SAGE Publications.
- Kvale, S. (1983) The qualitative research interview: a phenomenological and a hermeneutical mode of understanding. *Journal of Phenomenological Psychology*, 14(2), pp. 171-196.
- LaForge, K., Gold, R., Cottrell, E., Bunce, A. E., Prosper, M., Hollocombe, C., Dambrun, K., Cohen, D. J. and Clark, K. D. (2018) How 6 organizations developed tools and processes for social determinants of health screening in primary care: An overview. *The Journal Of Ambulatory Care Management*, 41(1), pp. 2-14.
- Laher, S. (2016) Ostinato rigore: Establishing methodological rigour in quantitative research. *South African Journal of Psychology*, 46(3), pp. 316–327.
- Laing, K., Steer, M., Lawson, S., Penn, L., O'Brien, N., Wildman, J. and Moffatt, S. (2017) *"It Was the Turning Point in my Life": How Ways to Wellness social prescribing is improving the health and wellbeing of people with long-term conditions*. Evaluation report to the Cabinet Office. Newcastle University. Available at: file:///C:/Users/ID917072/Downloads/Laing_et_al._2017a.pdf [Accessed 26 June 2018].
- Lakhanpaul, M., Bird, D., Culley, L., Hudson, N., Robertson, N., Johal, N., McFeeters, M., Hamlyn-Williams, C. and Johnson, M. (2014) The use of a collaborative structured methodology for the development of a multifaceted intervention programme for the management of asthma (the MIA project). *Health Services and Delivery Research*, 2(28), pp. 10.3310/hsdr02280.
- Langford, K., Baeck, P. and Hampson, M. (2013) *More Than Medicine: New services for people powered health*. London. Available at: http://www.nesta.org.uk/sites/default/files/more_than_medicine.pdf [Accessed 29 August 2019].
- Larrimore, J. (2011) Does a higher income have positive health effects? Using the earned income tax credit to explore the income-health gradient. *The Milbank Quarterly*, 89(4), pp. 694-727.
- Latkin, C. A., Edwards, C., Davey-Rothwell, M. A. and Tobin, K. E. (2017) The relationship between social desirability bias and self-reports of health, substance use, and social network factors among urban substance users in Baltimore, Maryland. *Addictive Behaviors*, 73(1), pp. 133–136.
- Lawson, T. (2014) A conception of social ontology. In: S. Pratten, ed. *Social Ontology and Modern Economics*. London: Routledge, pp. 19-51.
- Leavell, M. A., Leiferman, J. A., Gascon, M., Braddick, F., Gonzalez, J. C. and Litt, J. S. (2019) Nature-Based Social Prescribing in Urban Settings to Improve Social Connectedness and Mental Well-being: A review. *Current Environmental Health Reports*, pp.
- Lee, A. and Sundar, S. (2018) Social prescribing: an essential but neglected component of the undergraduate medical curriculum. *Education for Primary Care*, 31(29), pp. 1-3.
- Leijten, F. R. M., Struckmann, V., van Ginneken, E., Czipionka, T., Kraus, M., Reiss, M., Tsiachristas, A., Boland, M., de Bont, A., Bal, R., Busse, R. and Mølken, M. R. (2018) The SELFIE framework for integrated care for multi-morbidity: Development and description. *Health Policy*, 122(1), pp. 12-22.

- Lepa, T., Norris, P., Horsburgh, S. and Taungapeau, F. (2013) Accuracy of National Health Index numbers for Pacific people in NZ. *Australian And New Zealand Journal Of Public Health*, 37(2), pp. 189-190.
- Leutz, W. N. (1999) Five laws for integrating medical and social services: lessons from the United States and the United Kingdom. *Milbank Quarterly*, 77(1), pp. 77–110.
- Levac, D., Colquhoun, H. and O'Brien, K. K. (2010) Scoping studies: advancing the methodology. *Implementation Science*, 5(69), pp. 69-10.
- Lewis, R., Rosen, R., Goodwin, N. and Dixon, J. (2010) *Where Next for Integrated Care Organisations in the English NHS?* London. Available at: <https://www.nuffieldtrust.org.uk/research/where-next-for-integrated-care-organisations-in-the-english-nhs> [Accessed 4 July 2020].
- Liles, A. and Darnton, P. (2017) *Social Prescribing in Wessex: Understanding its impact and supporting spread. R-outcomes: Measure what matters*. Available at: <http://wessexahsn.org.uk/img/projects/Wessex%20Social%20Prescribing-1529938576.pdf> [Accessed 17 October 2017].
- Lincoln, Y. S. and Guba, E. G. (1985) *Naturalistic Inquiry*. Newbury Park, CA: SAGE Publications.
- Linder, J. A., Kaleba, E. O. and Kmetik, K. S. (2009) Using electronic health records to measure physician performance for acute conditions in primary care: Empirical evaluation of the community-acquired pneumonia clinical quality measure set. *Medical Care*, 47(2), pp. 208–216.
- Ling, T., Brereton, L., Conklin, A., Newbould, J. and Roland, M. (2012) Barriers and facilitators to integrating care: experiences from the English Integrated Care Pilots. *International Journal Of Integrated Care*, 12pp. e129.
- Lipscomb, M. (2008) Mixed method nursing studies: a critical realist critique. *Nursing Philosophy*, 9(1), pp. 32-45.
- LoCurto, J. and Berg, G. M. (2016) Trust in healthcare settings: scale development, methods, and preliminary determinants. *SAGE Open Medicine*, 4(1), pp. 1-12.
- Lofters, A. K., Shankardass, K., Kirst, M. and Quinonez, C. (2011) Sociodemographic data collection in healthcare settings: An examination of public opinions. *Medical Care*, 49(2), pp. 193-199.
- Loftus, A. M., McCauley, F. and McCarron, M. O. (2017) Impact of social prescribing on general practice workload and polypharmacy. *Public Health*, 148(3), pp. 96-101.
- Long, T. and Johnson, M. (2000) Rigour, reliability and validity in qualitative research. *Clinical Effectiveness in Nursing*, 4(1), pp. 30-37.
- Long, T. and Johnson, M. (2007) *Research Ethics in the Real World: Issues and solutions for health and social care professionals*. London: Churchill Livingstone.
- Longwill, A. (2014) *Independent Evaluation of Hackney WellFamily Service*. Available at: <https://www.family-action.org.uk/content/uploads/2014/07/Wellfamily-Final.pdf> [Accessed 28 February 2018].
- Lorig, K. R. and Holman, H. (2003) Self-management education: History, definition, outcomes, and mechanisms. *Annals of Behavioral Medicine*, 26(1), pp. 1-7.
- Loudon, I. (2008) The principle of referral: the gatekeeping role of the GP. *British Journal of General Practice*, 58(547), pp. 128-130.
- Louw, J. M., Marcus, T. S. and Hugo, J. (2017) Patient- or person-centred practice in medicine? - A review of concepts. *African Journal Of Primary Health Care & Family Medicine*, 9(1), pp. e1-e7.
- Lovell, R., Husk, K., Blockley, K., Bethel, A., Bloomfield, D., Warber, S., Pearson, M., Lang, I., Byng, R. and Garside, R. (2017) A realist review and collaborative development of what works in the social prescribing process. *The Lancet*, 390(1), pp. S62.
- Mackie, S. and Darvill, A. (2016) Factors enabling implementation of integrated health and social care: a systematic review. *British Journal Of Community Nursing*, 21(2), pp. 82–87.

- Macmillan (2016) *An Economic Analysis of the Recovery Package*. London. Available at: https://www.macmillan.org.uk/images/economic-analysis-of-recovery-package_tcm9-315863.pdf [Accessed 11 April 2019].
- Majeed, A., Car, J. and Sheikh, A. (2008) Accuracy and completeness of electronic patient records in primary care. *Family Practice*, 25(4), pp. 213-214.
- Mann, C. and Stewart, F. (2002) Internet interviewing. In: J. F. Gubrium and J. A. Holstein, eds. *Handbook of Interview Research: Context and Method*. Thousand Oaks, CA: SAGE Publications, pp. 603–628.
- Mann, F., Bone, J. K., Lloyd-Evans, B., Frerichs, J., Pinfold, V., Ma, R., Wang, J. and Johnson, S. (2017) A life less lonely: the state of the art in interventions to reduce loneliness in people with mental health problems. *Social Psychiatry and Psychiatric Epidemiology*, 52(6), pp. 627-638.
- Marchionini, G. and Teague, J. (1987) Elementary students' use of electronic information services: an exploratory study. *Journal of Research on Computing in Education*, 20(2), pp. 139-155.
- Marmot, M., Allen, J., Goldblatt, P., Boyce, T., McNeish, D., Grady, M. and Geddes, I. (2010) *Fair Society, Healthy Lives. The Marmot Review*. Available at: <http://www.instituteofhealthequity.org/resources-reports/fair-society-healthy-lives-themarmot-review/fair-society-healthy-lives-full-report-pdf.pdf> [Accessed 17 July 2018].
- Marquart, F. (2017) Methodological rigor in quantitative research. In: J. Matthes, C. S. Davis and R. F. Potter, eds. *The International Encyclopedia of Communication Research Methods*. New Jersey, US: John Wiley & Sons.
- Martin, D. (2018) *Doctors to Prescribe Dance Lessons on the NHS and Postal Workers to Check on the Lonely in Bid to Help More Than 200,000 Brits Who Have not Spoken With a Friend or Relative in a Month*. Available at: <https://www.dailymail.co.uk/news/article-6275375/Doctors-prescribe-dance-lessons-lonely-NHS-Theresa-Mays-bid-tackle-loneliness.html> [Accessed 19 March 2019].
- Martin, L. R., Williams, S. L., Haskard, K. B. and DiMatteo, M. R. (2005) The challenge of patient adherence. *Therapeutics and Clinical Risk Management*, 1(3), pp. 189-199.
- Martínez-García, M., Salinas-Ortega, M., Estrada-Arriaga, I., Hernández-Lemus, E., García-Herrera, R. and Vallejo, M. (2018) A systematic approach to analyze the social determinants of cardiovascular disease. *PLoS One*, 13(1), pp. e0190960.
- Maruthappu, M. (2016) *Delivering Triple Prevention: A Health System Responsibility*. Available at: <https://www.england.nhs.uk/blog/mahiben-maruthappu-10/>.
- Maruthappu, M., Hasan, A. and Zeltner, T. (2015) Enablers and barriers in implementing integrated care. *Health Systems & Reform*, 1(4), pp. 250–256.
- Mason, J. (1994) Linking qualitative and quantitative data analysis. In: A. Bryman and R. Burgess, eds. *Analyzing Qualitative Data*. London: Routledge, pp. 89-110.
- Maughan, D. L., Patel, A., Parveen, T., Braithwaite, I., Cook, J., Lillywhite, R. and Cooke, M. (2016) Primary-care-based social prescribing for mental health: an analysis of financial and environmental sustainability. *Primary Health Care Research Development*, 17(2), pp. 114-121.
- Maund, P. R., Irvine, K. N., Reeves, J., Strong, E., Cromie, R., Dallimer, M. and Davies, Z. G. (2019) Wetlands for wellbeing: Piloting a nature-based health intervention for the management of anxiety and depression. *International Journal Of Environmental Research And Public Health*, 16(22), pp.
- May, T. (2011) *Social Research: Issues, methods, and process*. 4th ed. Berkshire: McGraw-Hill Education.
- McCambridge, J., Witton, J. and Elbourne, D. R. (2014) Systematic review of the Hawthorne effect: new concepts are needed to study research participation effects. *Journal of Clinical Epidemiology*, 67(3), pp. 267-277.

- McColl, M. A., Shortt, S., Godwin, M., Smith, K., Rowe, K., O'Brien, P. and Donnelly, C. (2009) Models for integrating rehabilitation and primary care: a scoping study. *Archives of Physical Medicine and Rehabilitation*, 90(9), pp. 1523–1531.
- McConaghie, A. (2017) *Social Prescribing: can the NHS make it mainstream?* Available at: <https://pharmaphorum.com/views-and-analysis/social-prescribing-answer-englands-ills/> [Accessed 18 December 2018].
- McEvoy, P. and Richards, D. (2003) Critical realism: a way forward for evaluation research in nursing? *Journal of Advance Nursing*, 43(4), pp. 411-420.
- McEvoy, P. and Richards, D. (2006) A critical realist rationale for using a combination of quantitative and qualitative methods. *Journal of Research in Nursing*, 11(1), pp. 66-78.
- McFarland, A. and MacDonald, E. (2019) Role of the nurse in identifying and addressing health inequalities. *Nursing Standard*, 34(4), pp. 37-42.
- McGinnis, J. M., Williams, P. and Knickman, J. R. (2002) The case for more active policy attention to health promotion,. *Health Affairs*, 21(2), pp.
- McLaughlin, H. (2008) What's in a Name: 'Client', 'Patient', 'Customer', 'Consumer', 'Expert by Experience', 'Service User'—What's Next? *The British Journal of Social Work*, 39(6), pp. 1101-1117.
- McLoughlin, P., Murphy, E., O'Sullivan, F. and Connellan, C. (2019) An Integrated Care Approach to the Uses of Social Prescribing in an Acutely Frail Older Adult Cohort. *Age And Ageing*, 48pp. iii1-iii16.
- McPherson, C., Ploeg, J., Edwards, N., Ciliska, D. and Sword, W. (2017) A catalyst for system change: A case study of child health network formation, evolution and sustainability in Canada. *BMC Health Services Research*, 1(17), pp. 100.
- McWhinney, I. R. (1997) *A Textbook of Family Medicine*. New York: Oxford University Press.
- Meho, L. I. (2006) E-mail interviewing in qualitative research: a methodological discussion. *Journal of the Association for Information Science and Technology*, 57(10), pp. 1284–1295.
- Menachemi, N. and Collum, T. H. (2011) Benefits and drawbacks of electronic health record systems. *Risk Management Healthcare Policy*, 4(1), pp. 47-55.
- Mental Health Foundation (2005) *Up and Running?* London. Available at: https://www.mentalhealth.org.uk/sites/default/files/up_running_report.pdf [Accessed 10 May 2016].
- Mental Health Foundation (2009) *Moving on Up*. Available at: <https://www.mentalhealth.org.uk/publications/moving> [Accessed 1 August 2019].
- Mercer, S. W., Fitzpatrick, B., Grant, L., Chng, N. R., McConnachie, A., Bakhshi, A., James-Rae, G., O'donnell, C. A. and Wyke, S. (2019) Effectiveness of community-links practitioners in areas of high socioeconomic deprivation. *Annals of Family Medicine*, 17(6), pp. 518-525.
- Mercer, S. W., Fitzpatrick, B., Grant, L., Chng, N. R., O'Donnell, C. A., Mackenzie, M., McConnachie, A., Bakhshi, A. and Wyke, S. (2017) The Glasgow 'Deep End' Links Worker Study Protocol: a quasi-experimental evaluation of a social prescribing intervention for patients with complex needs in areas of high socioeconomic deprivation. *Journal Of Comorbidity*, 7(1), pp. 1-10.
- Merriam, S. B. (1998) Qualitative research and case study applications in education. In: S. B. Merriam, ed. *Case Study Research in Education: A Qualitative Approach*. San Francisco: Jossey-Bass Publishers, pp. 275.
- Merriam, S. B. (2009) *Qualitative Research: A guide to design and implementation*. San Francisco, CA: Jossey-Bass.
- Mery, G., Majumder, S., Brown, A. and Dobrow, M. (2017) What do we mean when we talk about the Triple Aim? A systematic review of evolving definitions and adaptations of the framework at the health system level. *Health Policy*, 121(6), pp. 629-636.
- Mickan, S. and Rodger, S. (2000) Characteristics of effective teams: a literature review. *Australian Health Review*, 23(3), pp. 201-208.

- Miles, J. and Gilbert, P. (2005) *A Handbook of Research Methods for Clinical and Health Psychology*. Oxford: Oxford University Press.
- Miles, M. B. and Huberman, A. B. (1994) *Qualitative Data Analysis: An expanded sourcebook*. London: SAGE Publications.
- Miller, C. J., Grogan-Kaylor, A., Perron, B. E., Kilbourne, A. M., Woltmann, E. and Bauer, M. S. (2013) Collaborative chronic care models for mental health conditions: Cumulative meta-analysis and metaregression to guide future research and implementation. *Medical Care*, 51(10), pp. 922-930.
- Miller, J. and Glassner, B. (2011) The “inside” and the “outside”: finding realities in interviews. In: D. Silverman, ed. *Qualitative Research*. London: SAGE Publications, pp. 125-139.
- Mills, A. J., Gabrielle, D. and Wiebe, E. (2010) *Encyclopedia of Case Study Research*. Thousand Oaks: Sage.
- Mills, S. L., Brady, T. J., Jayanthan, J., Ziabakhsh, S. and Sargious, P. M. (2016) Toward consensus on self-management support: the international chronic condition self-management support framework†. *Health Promotion International*, 32(6), pp. 942-952.
- Miner, L., Bolding, P., Hilbe, J., Goldstein, M., Hill, T., Nisbet, R., Walton, N. and Miner, G. P. (2014) *Practical Predictive Analytics and Decisioning Systems for Medicine*. London: Academic Press.
- Mingers, J. (2000) The contribution of critical realism as an underpinning philosophy for OR/MS and systems. *Journal of the Operational Research Society*, 51(11), pp. 1256-1270.
- Minichiello, V., Aroni, R. and Hays, T. N. (2008) *In-Depth Interviewing: Principles, techniques, analysis*. 3rd ed. Frenchs Forest: Pearson Education Australia.
- Mir, R., Willmott, H. and Greenwood, M. (2016) *The Routledge Companion to Philosophy in Organization Studies*. Oxon: Routledge.
- Mitchell, M. L. and Jolley, J. M. (2012) *Research Design Explained*. 8th ed: Wadsworth Publishing.
- Moffatt, S., Steer, M., Lawson, S., Penn, L. and O’Brien, N. (2017) Link Worker social prescribing to improve health and well-being for people with long-term conditions: qualitative study of service user perceptions. *BMJ Open*, 7(7), pp. e015203.
- Moher, D., Liberati, A., Tetzlaff, J. and Altman, D. (2009) Systematic reviews and meta analyses: The PRISMA statement. *Annals of Internal Medicine*, 151(4), pp. 264–269.
- Montgomery, H. E., Haines, A., Marlow, N., Pearson, G., Mythen, M. G., Grocott, M. P. W. and Swanton, C. (2017) The future of UK healthcare: Problems and potential solutions to a system in crisis. *Annals of Oncology*, 28(1), pp. 1751–1755.
- Moore, G., Audrey, S., Barker, M., Bond, L., Bonell, C., Hardeman, W., Moore, L., O’Cathain, A., Tinati, T., Wight, D. and Baird, J. (2014) *Process Evaluation of Complex Interventions*. London. Available at: <http://decipher.uk.net/wp-content/uploads/2014/11/MRC-PHSRN-Process-evaluationguidance.pdf> [Accessed 9 March 2019].
- Morgan, F., Battersby, A., Weightman, A. L., Searchfield, L., Turley, R., Morgan, H., Jagroo, J. and Ellia, S. (2016) Adherence to exercise referral schemes by participants – What do providers and commissioners need to know? A systematic review of barriers and facilitators. *BMC Public Health*, 5(16), pp. 227.
- Morgan, G. (1997) *Images of Organization*. Second ed. Thousand Oaks: SAGE.
- Morgan, M. J. and Summers, J. (2005) *Sports Marketing*. Victoria, Australia: Thompson.
- Morton, L., Ferguson, M. and Baty, F. (2015) Improving wellbeing and self-efficacy by social prescription. *Public Health*, 129(3), pp. 286-289.
- Mossabir, R., Morris, R., Kennedy, A., Blickem, C. and Rogers, A. (2015) A scoping review to understand the effectiveness of linking schemes from healthcare providers to community resources to improve the health and well-being of people with long-term conditions. *Health & Social Care In The Community*, 23(5), pp. 467-484.
- Mukoro, F. (2011) *Care Planning Mini Topic Review*. London. Available at: <https://www.england.nhs.uk/improvement-hub/wp->

- [content/uploads/sites/44/2017/11/Care-Planning-Mini-Topic-Review.pdf](#) [Accessed 11 April 2019].
- Murray, A., Daines, L., Archibald, D., Hawkes, R., Grant, M. and Mutrie, N. (2016) The relationship and effects of golf on physical and mental health: A scoping review protocol. *British Journal Of Sports Medicine*, 50(11), pp. 647-650.
- Nahapiet, J. and Ghoshal, S. (1998) Social capital, intellectual capital, and the organizational advantage. *Academy of Management Review*, 23(2), pp. 242.
- National Academy for Social Prescribing (2020) *A Social Revolution in Wellbeing: Strategic plan 2020-23*. Available at: https://socialprescribingacademy.org.uk/wp-content/uploads/2020/03/NASP_strategic-plan_web.pdf [Accessed 21 January 2020].
- National Voices (2013) *A Narrative for Person-Centred Coordinated Care*. London. Available at: <http://www.nationalvoices.org.uk/sites/default/files/public/publications/narrative-for-person-centred-coordinated-care.pdf> [Accessed 25 March 2020].
- Natural England (2017) *Good Practice in Social Prescribing for Mental Health: The role of nature-based interventions. Natural England Commissioned Report NECR228*. Available at: [file:///C:/Users/ID917072/Downloads/NECR228%20Edition%201%20-%20Good%20Practice%20in%20Social%20Prescribing%20for%20mental%20health,%20the%20role%20of%20nature-based%20interventions%20\(5\).pdf](file:///C:/Users/ID917072/Downloads/NECR228%20Edition%201%20-%20Good%20Practice%20in%20Social%20Prescribing%20for%20mental%20health,%20the%20role%20of%20nature-based%20interventions%20(5).pdf) [Accessed 22 November 2018].
- Nazroo, J. Y. (2003) The structuring of ethnic inequalities in health: economic position, racial discrimination, and racism. *Am J Public Health*, 93(2), pp. 277-284.
- Neuman, L. W. (2000) *Social Research Methods: Qualitative and quantitative approaches* Fourth ed. USA: Allyn and Bacon.
- NextGate (2020) *The State of Patient Matching in America: A 2020 national survey*. Available at: https://marketing.nextgate.com/acton/attachment/3826/f-113c4b92-3369-4b94-8612-d57b2889e964/1/-/-/-/NextGate-eHI%20Patient%20Matching%20Survey%20Results.pdf?nc=0&ao_optin=1 [Accessed 26 January 2021].
- NHS. (2020) *NHS Stop Smoking Services Help you Quit*. Available at: <https://www.nhs.uk/live-well/quit-smoking/nhs-stop-smoking-services-help-you-quit/> [Accessed 28 October 2020].
- NHS and England, H. E. (2016) *Social Prescribing at a Glance: North West England. A scoping report of activity for the North West*. Manchester. Available at: <https://www.hee.nhs.uk/sites/default/files/documents/Social%20Prescribing%20at%20a%20Glance.pdf> [Accessed 13 March 2018].
- NHS Alliance and Primary Care Foundation (2015) *Making Time in General Practice*. Available at: http://www.primarycarefoundation.co.uk/images/PrimaryCareFoundation/Downloading_Reports/PCF_Press_Releases/Making-Time-in_General_Practice_FULL_REPORT_28_10_15.pdf [Accessed 1 February 2018].
- NHS Education for Scotland. (2008) *Bridging the Gap: A health inequalities learning resource*. Available at: <http://www.bridgingthegap.scot.nhs.uk/understanding-health-inequalities/introducing-the-wider-determinants-of-health.aspx> [Accessed 27 July 2017].
- NHS England (2014) *Five Year Forward View*. Available at: <https://www.england.nhs.uk/wp-content/uploads/2014/10/5yfv-web.pdf> [Accessed 3 March 2021].
- NHS England (2016a) *General Practice Development Programme*. London. Available at: <https://www.england.nhs.uk/gp/gp/fv/redesign/gpdp/> [Accessed 1 March 2017].
- NHS England (2016b) *General Practice Forward View*. England. Available at: <https://www.england.nhs.uk/wp-content/uploads/2016/04/gp/fv.pdf> [Accessed 3 July 2017].
- NHS England (2016c) *Releasing Capacity in General Practice: Policy opportunities and Ten High Impact Actions for practices*. London. Available at: <https://www.networks.nhs.uk/nhs-networks/releasing-capacity-in-general->

- [practice/messageboard/documents/Releasingcapacityingeneralpracticetenhhighimpactaction sv2.docx](#) [Accessed 1 March 2017].
- NHS England. (2016d) *Releasing Time for Care*. Available at: <https://www.england.nhs.uk/gp/gp/vf/redesign/gpdp/releasing-time/> [Accessed 2 March 2017].
- NHS England (2019a) *Breaking Down Barriers to Better Health and Care*. Available at: <https://www.england.nhs.uk/wp-content/uploads/2019/04/breaking-down-barriers-to-better-health-and-care-march19.pdf> [Accessed 25 March 2020].
- NHS England. (2019b) *Digital Transformation*. Available at: <https://www.england.nhs.uk/digitaltechnology/> [Accessed 16 April 2019].
- NHS England (2019c) *The NHS Long Term Plan*. Available at: <https://www.longtermplan.nhs.uk/online-version/chapter-5-digitally-enabled-care-will-go-mainstream-across-the-nhs/5-improving-clinical-efficiency-and-safety/> [Accessed 12 February 2019].
- NHS England (2019d) *Social Prescribing*. Available at: <https://www.england.nhs.uk/personalisedcare/social-prescribing/> [Accessed 3 March 2021].
- NHS England. (2019e) *Social Prescribing: Short guidance for local areas 2019-20*. Available at: https://gallery.mailchimp.com/a694bc0ff11d9dd94b05ccd0d/files/f30ed636-31b1-4377-ae0f-c593d49b928c/VCSE_Social_Prescribing_short_guidance_for_local_areas_Feb19.pdf [Accessed 20 March 2019].
- NHS England (2019f) *The Universal Personalised Care: Implementing the Comprehensive Model document* Available at: <https://www.england.nhs.uk/wp-content/uploads/2019/01/universal-personalised-care.pdf> [Accessed 9 April 2019].
- NHS England. (2020a) *Data Quality Improvement*. Available at: <https://www.england.nhs.uk/data-services/validate/> [Accessed 24 August 2020].
- NHS England (2020b) *Social Prescribing and Community-Based Support Summary Guide*. London. Available at: <https://www.england.nhs.uk/publication/social-prescribing-and-community-based-support-summary-guide/> [Accessed 9 April 2019].
- NHS England (2020c) *Social Prescribing Link Workers: Reference guide for primary care networks*. Available at: <https://www.england.nhs.uk/publication/social-prescribing-link-workers/> [Accessed 20 January 2021].
- NHS England (2020d) *Supported Self-Management*. London. Available at: <https://www.england.nhs.uk/personalisedcare/supported-self-management/> [Accessed 23 April 2020].
- NHS England, Development, N. I. M. a. t. N. T., Authority), Care Quality Commission, Health Education England, National Institute for Health and Care Excellence and England, P. H. (2015) *Delivering the Forward View: NHS planning guidance 2016/17 – 2020/21* Available at: www.england.nhs.uk/ourwork/futurenhs/deliver-forward-view/ [Accessed 26 January 2016].
- Nicholson, C., Hepworth, J., Burrige, L., Marley, J. and Jackson, C. (2018) Translating the elements of health governance for integrated care from theory to practice: A case study approach. *International Journal Of Integrated Care*, 18(1), pp. 1–13.
- Niglas, K. (2007) Introducing the quantitative-qualitative continuum: an alternative view on teaching research methods courses. In: M. Murtonen, J. Rautopuro and P. Väisänen, eds. *Learning and Teaching of Research Methods at University*. Turku: Finnish Educational Research Association, pp. 185-203.
- Noble, H. and Smith, J. (2015) Issues of validity and reliability in qualitative research. *Evidence Based Nursing*, 18(2), pp. 34-35.
- Norton, L. (1999) The philosophical basis of grounded theory and the implication for research practice. *Nurse Researcher*, 7(1), pp. 31-43.
- Novitzky, J. (2013) *Community Learning and Health*. Leicester. Available at: http://www.learningandwork.org.uk/sites/niace_en/files/resources/CLIF%20-

- [%20Community%20learning%20and%20health.pdf?redirectedfrom=niace](#) [Accessed 15 June 2018].
- Nursing and Midwifery Council (2018) *Standards of Proficiency for Nurse and Midwife Prescribers*. London. Available at: <https://www.nmc.org.uk/globalassets/sitedocuments/standards/nmc-standards-proficiency-nurse-and-midwife-prescribers.pdf> [Accessed 10 October 2018].
- NWPHPN. (2019) *Dudley Social Prescribing Peer Learning Programme 2018*. Available at: <https://www.nwcpwd.nhs.uk/nwphpn/nwphpn-news/308-dudley-social-prescribing-peer-learning-programme-2018> [Accessed 7 May 2019].
- OECD (2012) *Education at a Glance 2012*. Paris: OECD Publishing.
- OECD (2013) Methodological considerations in the measurement of subjective well-being. In: OECD, ed. *OECD Guidelines on Measuring Subjective Well-being*. Paris: OECD Publishing, pp. 61 - 138.
- OECD (2017) *Education at a Glance 2017: OECD indicators*. Paris: OECD Publishing.
- Office for National Statistics (2011) *Dudley Borough 2011 Census Profile Compared to England*. Dudley, UK Data Service.
- Office for National Statistics (2017) *Overview of the UK Population: March 2017*. London. Available at: <https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationandmigration/populationandmigration/overviews/articles/overviewoftheukpopulation/mar2017> [Accessed 15 November 2018].
- Ógáin, E., Lumley, T. and Prichard, D. (2012) *Making an Impact: Impact measurement among charities and social enterprises in the UK*. London, UK. Available at: <https://www.thinknpc.org/resource-hub/making-an-impact/> [Accessed 30 July 2019].
- Ogden, J. (2018) Where next for social prescribing in England? *Prescriber*, 29(5), pp. 31-34.
- Olsen, W. (2004) Triangulation in social research: qualitative and quantitative methods can really be mixed. In: M. Holborn, ed. *Developments in Sociology*. Causeway Press, pp. 103–118.
- Opdenakker, R. (2006) Advantages and disadvantages of four interview techniques in qualitative research. *Forum Qualitative Sozialforschung*, 7(4), pp. 11.
- Øvretveit, J. (2011) *Evidence: Does clinical coordination improve quality and save money? Volume 1: The Health Foundation*.
- Owens, J. (2011) *An Introduction to Critical Realism as a Meta-Theoretical Research Perspective*. London. Available at: <https://www.kcl.ac.uk/ecs/research/Research-Centres/cppr/workingpapers/Paper-1.pdf> [Accessed 30 September 2017].
- Palinkas, L. A., Howrwith, S. M., Green, C. A., Wisdom, J. P., Duan, N. and Hoagwood, K. (2015) Purposeful sampling for qualitative data collection and analysis in mixed method implementation research. *Administration And Policy In Mental Health*, 42(5), pp. 533–544.
- Palmieri, J. J. and Theodore, A. S. (2009) Lies in the Doctor-Patient Relationship. *Primary Care Companion Journal of Clinical Psychiatry*, 11(4), pp. 163-168.
- Paltridge, B. (2012) *Discourse Analysis: An introduction*. London: Bloomsbury Publishing.
- Panagioti, M., Reeves, D., Meacock, R., Parkinson, B., Lovell, K., Hann, M., Howells, K., Blakemore, A., Riste, L., Coventry, P., Blakeman, T., Sidaway, M. and Bower, P. (2018) Is telephone health coaching a useful population health strategy for supporting older people with multimorbidity? An evaluation of reach, effectiveness and cost-effectiveness using a 'trial within a cohort'. *BMC Med*, 16(1), pp. 80.
- Pandey, S. and Patnaik, S. (2014) Establishing reliability and validity in qualitative inquiry: a critical examination. *Jharkhand Journal of Development and Management Studies*, 12(1), pp. 5743-5753.
- Parkin, E. (2019) *Health and Social Care Integration. Briefing Paper*. London. Available at: <https://commonslibrary.parliament.uk/research-briefings/cbp-7902/> [Accessed 21 April 2020].
- Parliament UK (2015) *Political Challenges Relating to an Aging Population: Key issues for the 2015 Parliament*. London. Available at:

- <https://www.parliament.uk/business/publications/research/key-issues-parliament-2015/social-change/ageing-population/> [Accessed 6 March 2017].
- Parsons, S., Bury, M., Carter, S., Hurst, P., Magee, H. and Taylor, D. (2010) *Self-Management Support Amongst Older Adults: The availability, impact and potential of locally based services and resources. Report for the National Institute for Health Research Service Delivery and Organisation Programme*. London. Available at: <https://pdfs.semanticscholar.org/38ed/cdb9cf3595bb92d7936ea84894f450f900dc.pdf> [Accessed 23 April 2020].
- Patino, C. M. and Ferreria, J. C. (2018) Internal and external validity: can you apply research study results to your patients? *The Brazilian Journal of Pulmonology and International Databases*, 44(3), pp. 183.
- Patton, M. Q. (2015) *Qualitative Research & Evaluation Methods: Integrating theory and practice*. 4th ed. London: SAGE Publications.
- Pavey, T., Taylor, A., Hillsdon, M., Fox, K., Campbell, J., Foster, C., Maoxham, T., Mutrie, N., Searle, J. and Taylor, R. (2012) Levels and predictors of exercise referral scheme uptake and adherence: A systematic review. *Journal of Epidemiology and Community Health*, 66(8), pp. 737–744.
- Pawson, R. and Tilley, N. (1997) *Realistic Evaluation*. London: SAGE Publications.
- Payne, K., Walton, E. and Burton, C. (2019) Steps to benefit from social prescription: a qualitative interview study. *The British Journal Of General Practice: The Journal Of The Royal College Of General Practitioners*, pp.
- Pescheny, J., Randhawa, G. and Pappas, Y. (2018a) Patient uptake and adherence to social prescribing: a qualitative study. *BJGP open*, 2(3), pp. bjgpopen18X101598.
- Pescheny, J. V. (2019) An Evaluation of the Implementation and Practice of Social Prescribing. Bedfordshire, The University of Bedfordshire.
- Pescheny, J. V., Gunn, L. H., Randhawa, G. and Pappas, Y. (2019a) The impact of the Luton social prescribing programme on energy expenditure: a quantitative before-and-after study. *BMJ Open*, 9(6), pp. e026862-e026862.
- Pescheny, J. V., Pappas, Y. and Randhawa, G. (2018b) Evaluating the implementation and delivery of a social prescribing intervention: a research protocol. *International Journal Of Integrated Care*, 18(1), pp. 13.
- Pescheny, J. V., Pappas, Y. and Randhawa, G. (2018c) Facilitators and barriers of implementing and delivering social prescribing services: a systematic review. *BMC Health Services Research*, 18(1), pp. 86.
- Pescheny, J. V., Randhawa, G. and Pappas, Y. (2019b) The impact of social prescribing services on service users: a systematic review of the evidence. *European Journal of Public Health*, 17(835), pp.
- Peters, M. D., Godfrey, C. M., Khalil, H., McInerney, P., Parker, D. and Soares, C. B. (2015) Guidance for conducting systematic scoping reviews. *International Journal Of Evidence-Based Healthcare*, 13(3), pp. 141-146.
- Petkovic, J., Duench, S. L., Welch, V., Rader, T., Jennings, A., Forster, A. J. and Tugwell, P. (2018) Potential harms associated with routine collection of patient sociodemographic information: A rapid review. *Health Expectations*, 22(1), pp. 114– 129.
- Pham, M. T., Rajić, A., Greig, J. D., Sargeant, J. M., Papadopoulos, A. and McEwen, S. A. (2014) A scoping review of scoping reviews: advancing the approach and enhancing the consistency. *Research Synthesis Methods*, 5(4), pp. 371-385.
- Philip, K., Lewis, A. and Hopkinson, N. S. (2019) Music and dance in chronic lung disease. *Breathe (Sheffield, England)*, 15(2), pp. 116-120.
- Phillips, G., Bottomley, C., Schmidt, E., Tobi, P., Lais, S., Yu, G., Lynch, R., Lock, K., Draper, A., Moore, D., Clow, A., Petticrew, M., Hayes, R. and Renten, A. (2014) Well London Phase-1: results among adults of a cluster randomised trial of a community engagement approach to

- improving health behaviours and mental well-being in deprived inner-city neighbourhoods. *Journal of Epidemiology & Community Health*, 68(7), pp. 606-614.
- Pilkington, K., Loef, M. and Polley, M. (2017a) Searching for real-world effectiveness of health care innovations: scoping study of social prescribing for diabetes. *Journal Of Medical Internet Research*, 19(2), pp. e20.
- Pilkington, K., Loef, M. and Polley, M. (2017b) Searching for Real-World Effectiveness of Health Care Innovations: Scoping Study of Social Prescribing for Diabetes. *Journal Of Medical Internet Research*, 19(2), pp. e20-e20.
- Pinnock, H., Huby, G., Tierney, A., Hamilton, S., Powell, A., Kielmann, T. and Sheikh, A. (2009) Is multidisciplinary teamwork the key? A qualitative study of the development of respiratory services in the UK. *Journal Of The Royal Society Of Medicine*, 102(9), pp. 378-390.
- Pizam, A. and Mansfield, Y. (2009) *Consumer Behaviour in Travel and Tourism*. New York: Howarth Hospitality Press.
- Plochg, T. and Klazinga, N. (2002) Community-based integrated care: Myth or must? *International Journal for Quality in Health Care*, 14(2), pp. 91–101.
- Plowright, D. (2011) *Using Mixed Methods: Frameworks for an Integrated Methodology*. London: SAGE Publications.
- Polley, M. (2018) *Speech to the Social Prescribing Network Conference. The Social Prescribing Network*. Bristol Zoo. Available at:
- Polley, M., Bertotti, M., Kimberlee, R., Pilkington, K. and Refsum, C. (2017a) *A Review of the Evidence Assessing Impact of Social Prescribing on Healthcare Demand and Cost Implications*. Available at: https://docs.wixstatic.com/ugd/14f499_75b884ef9b644956b897fcec824bf92e.pdf [Accessed 17 April 2020].
- Polley, M., Chatterjee, H. and Clayton, G. (2017b) Social prescribing: community-based referral in public health. *Perspectives In Public Health*, 138(1), pp. 18-19.
- Polley, M. and Dixon, M. (2016) *Report of the Annual Social Prescribing Network Conference. The Annual Social Prescribing Network Conference*. London. Available at: [file:///C:/Users/ID917072/Downloads/social-prescribing-network-conference-report%20\(2\).pdf](file:///C:/Users/ID917072/Downloads/social-prescribing-network-conference-report%20(2).pdf) [Accessed 24 October 2016].
- Polley, M., Fleming, J., Anfilogoff, T. and Carpenter, A. (2017c) *Making Sense of Social Prescribing*. London. Available at: [file:///C:/Users/ID917072/Downloads/Making-sense-of-social-prescribing%2017%20\(1\).pdf](file:///C:/Users/ID917072/Downloads/Making-sense-of-social-prescribing%2017%20(1).pdf) [Accessed 27 March 2018].
- Pons-Vigués, M., Berenguera, A., Coma-Auli, N., March, S., Pombo, H., Masluk, B., Pulido-Fuentes, M., Rodriguez, C., Bellón, J. A. and Pujol-Ribera, E. (2019) Qualitative evaluation of a complex intervention to implement health promotion activities according to healthcare attendees and health professionals: EIRA study (phase II). *BMJ Open*, 9(3), pp. e023872-e023872.
- Popay, J., Kowarzik, U., Mallinson, S., Mackian, S. and Barker, J. (2007a) Social problems, primary care and pathways to help and support: addressing health inequalities at the individual level. Part 1: The GP perspective. *Journal of Epidemiology & Community Health*, 61(11), pp. 966-971.
- Popay, J., Kowarzik, U., Mallinson, S., Mackian, S. and Barker, J. (2007b) Social problems, primary care and pathways to help and support: Addressing health inequalities at the individual level. Part II: Lay perspectives. *Journal of Epidemiology and Community Health*, 61(11), pp. 972-977.
- Pope, C. and Mays, N. (2006) *Qualitative Research in Health Care*. 3rd ed. Oxford: Blackwell Publishing.
- POST (2011) *Housing and Health*. London. Available at: http://www.parliament.uk/documents/post/postpn_371-housing_health_h.pdf [Accessed 30 January 2018].

- Poulsen, R. M., Pii, K. H., Bültmann, U., Meijer, M., Eplöv, L. F., Albertsen, K. and Christensen, U. (2019) Developing normative integration among professionals in an intersectoral collaboration: A multi-method investigation of an integrated intervention for people on sick leave due to common mental disorders. *International Journal Of Integrated Care*, 19(4), pp. 4.
- Price, S., Hookway, A. and King, S. (2017) *Social Prescribing Evidence Map: Technical report*. Cardiff. Available at: [http://www2.nphs.wales.nhs.uk:8080/PubHObservatoryProjDocs.nsf/3653c00e7bb6259d80256f27004900db/79aaec9b966bc2e8025815500511894/\\$FILE/Social%20prescribing%20technical%20report%20v1%200.pdf](http://www2.nphs.wales.nhs.uk:8080/PubHObservatoryProjDocs.nsf/3653c00e7bb6259d80256f27004900db/79aaec9b966bc2e8025815500511894/$FILE/Social%20prescribing%20technical%20report%20v1%200.pdf) [Accessed 5 February 2019].
- Primary Care Hub (2018) *Social Prescribing in Wales*. Cardiff. Available at: <http://www.primarycareone.wales.nhs.uk/sitesplus/documents/1191/Social%20Prescribing%20Final%20Report%20v9%202018.pdf> [Accessed 3 July 2019].
- Prior, F., Coffey, M., Robins, A. and Cook, P. (2019) Long-term health outcomes associated with an exercise referral scheme: An observational longitudinal follow-up study. *Journal of Physical Activity & Health*, 16(4), pp. 288-293.
- Proctor, S. (1998) Linking philosophy and method in the research process: the case for realism. *Nurse Researcher*, 5(4), pp. 73-90.
- PSIAMS. (2018) *PSIAMS Systems*. Available at: <https://psiams.com/> [Accessed 28 February 2018].
- Public Health England (2015) *A Guide to Community-Centred Approaches for Health and Wellbeing*. London. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/417515/A_guide_to_community-centred_approaches_for_health_and_wellbeing_full_report_.pdf [Accessed 1 November 2018].
- Public Health England (2018) *Health Profile for England: 2018*. London. Available at: <https://www.gov.uk/government/publications/health-profile-for-england-2018> [Accessed 8 April 2020].
- Pye, S. (2018) *Addressing Social Determinants of Health Through the NHS*. London. Available at: <https://www.health.org.uk/newsletter-feature/addressing-social-determinants-of-health-through-the-nhs> [Accessed 22 April 2020].
- Pype, P., Mertens, F., Helewaut, F. and Krystallidou, D. (2017) Healthcare teams as complex adaptive systems: Understanding team behaviour through team members' perception of interpersonal interaction. *BMC Health Services Research*, 18(570), pp. 2028-2034.
- Quan, H., Wong A, Johnson, D. and Ghali, W. A. (2006) The public endorses collection of ethnicity information in hospital: implications for routine data capture in Canadian health systems. *Healthcare Policy*, 1(13), pp. 55-64.
- Quirk, H. and Haake, S. (2019) How can we get more people with long-term health conditions involved in parkrun? A qualitative study evaluating parkrun's PROVE project. *BMC Sports Science, Medicine & Rehabilitation*, 11(1), pp.
- Ramchand, R., Ahluwalia, S. C., Xenakis, L., Apaydin, E., Raaen, L. and Grimm, G. (2017) A systematic review of peer-supported interventions for health promotion and disease prevention. *Prev Med*, 101pp. 156-170.
- RAND Europe (2012) *National Evaluation of the Department of Health's Integrated Care Pilots*. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/215103/dh_133127.pdf [Accessed 25 March 2020].
- Randall, K. (2015) Social prescribing in practice. *Practice Nurse*, 45(9), pp. 34.
- Raven, M., Doran, K., Kostrowski, S., Gillespie, C. and B., E. (2011) An intervention to improve care and reduce costs for high-risk patients with frequent hospital admissions: a pilot study. *BMC Health Serv Res*, 11(270), pp. <https://doi.org/10.1186/1472-6963-1111-1270>.

- RCGP (2020) *About Person-Centred Care*. London. Available at: <https://www.rcgp.org.uk/clinical-and-research/our-programmes/about-person-centred-care.aspx> [Accessed 28 April 2020].
- Redmond, M., Sumner, R. C., Crone, D. M. and Hughes, S. (2019) 'Light in dark places': exploring qualitative data from a longitudinal study using creative arts as a form of social prescribing. *Arts Health*, 11(3), pp. 232-245.
- Regenstein, M. and Sickler, D. (2006) *Race, Ethnicity, and Language of Patients: Hospital practices regarding collection of information to address disparities in health care*. Washington, DC. Available at: https://hsrc.himmelfarb.gwu.edu/cgi/viewcontent.cgi?referer=https://www.google.co.uk/&httpsredir=1&article=1203&context=sphhs_policy_facpubs [Accessed 11 May 2018].
- Regitz-Zagrosek, V. (2012) Sex and gender differences in health: science & society series on sex and science. *EMBO Reports*, 13(7), pp. 596–603.
- Rempel, E. S., Wilson, E. N., Durrant, H. and Barnett, J. (2017) Preparing the prescription: a review of the aim and measurement of social referral programmes. *BMJ Open*, 7(10), pp. e017734.
- Reynolds, P., Boyd, P. T., Blacklow, R. S., Jackson, J. S., Greenberg, R. S., Austin, D. F., Chen, V. W. and Edwards, B. K. (1994) The relationship between social ties and survival among black and white breast cancer patients. National Cancer Institute Black/White Cancer Survival Study Group. *Cancer Epidemiology and Prevention Biomarkers*, 3(3), pp. 253-259.
- Rieker, P. P. and Bird, C. E. (2005) Rethinking gender differences in health: why we need to integrate social and biological perspectives. *The Journals of Gerontology*, 60(Special Issue 2), pp. S40–S47.
- Ritchie, J., Lewis, J., Nicholls, C. M. and Ormston, R. (2013) *Qualitative Research Practice: A guide for social science students and researchers*. London: SAGE Publications.
- Ritchie, J. and Spencer, L. (1994) Qualitative data analysis for applied policy research. In: A. Bryman and R. G. Burgess, eds. *Analysing Qualitative Data*. London: Routledge.
- Robson, C. and McCartan, K. (2016) *Real World Research*. 4th ed. Chichester: John Wiley & Sons.
- Rolfe, G. (2006) Validity, trustworthiness and rigour: quality and the idea of qualitative research. *Journal Of Advanced Nursing*, 53(3), pp. 304-310.
- ROVA Wellness. (2018) *ROVA: The social prescribing platform*. Available at: <http://www.digitalalgorithms.com/ROVa> [Accessed 1 March 2018].
- Rowe, A. and Hogarth, A. (2005) Use of complex adaptive systems metaphor to achieve professional and organisational change. *Journal Of Advanced Nursing*, 51(4), pp. 396-405.
- Rowlingson, K. (2011) *Does Income Inequality Cause Health and Social Problems?* York. Available at: <https://www.jrf.org.uk/sites/default/files/jrf/migrated/files/inequality-income-social-problems-full.pdf> [Accessed 15 November 2018].
- Royal College of General Practitioners (2018a) *Spotlight on the 10 High Impact Actions*. Available at: <file:///C:/Users/ID917072/Downloads/RCGP-spotlight-on-the-10-high-impact-actions-may-2018.pdf> [Accessed 24 October 2018].
- Royal College of General Practitioners (2018b) *Tackling Loneliness: A community action plan*. Available at: <http://www.onmedica.com/getResource.aspx?resourceid=88f23ba5-74e9-46f3-8817-743662731031> [Accessed 24 October 2018].
- Royal College of Nursing (2011) *Research Ethics: RCN guidance for nurses*. London. Available at: <https://www.rcn.org.uk/professional-development/publications/pub-003138> [Accessed 2 September 2017].
- Royal Society for Public Health (2019) *Driving Forward Social Prescribing: A framework for Allied Health Professionals*. Available at: <https://www.rsph.org.uk/uploads/assets/uploaded/c4dceeb6-4ced-4bfa-9ec8a9780172fd4d.pdf> [Accessed 12 June 2020].
- Rubio-Valera, M., Pons-Vigués, M., Martínez-Andrés, M., Moreno-Peral, P., Berenguera, A. and Fernández, A. (2014) Barriers and facilitators for the implementation of primary prevention

- and health promotion activities in primary care: A synthesis through meta-ethnography. *PLoS One*, 9(2), pp. e89554.
- Rutledge, T., Linke, S. E., Olson, M. B., Francis, J., Johnson, B. D., Bittner, V., York, K., McClure, C., Kelsey, S. F., Reis, S. E., Cornell, C. E., Vaccarino, V., Sheps, D. S., Shaw, L. J., Krantz, D. S., Parashar, S. and Merz, C. N. (2008) Social networks and incident stroke among women with suspected myocardial ischemia. *Psychosomatic Medicine*, 70(3), pp. 282–287.
- Ryan, P. and Sawin, K. J. (2010) The individual and family self-management theory: Background and perspectives on context, process, and outcomes. *Nursing Outlook*, 57(4), pp. 217-225.
- Saks, M. and Allsop, J. (2012) *Researching Health: Qualitative, quantitative and mixed methods*. London: Sage.
- Sandelowski, M. (1993) Rigor or rigor mortis: the problem of rigor in qualitative research revisited. *Advances in Nursing Science*, 16(2), pp. 1-8.
- Sani, F., Madhok, V., Norbury, M., Dugard, P. and Wakefield, J. R. (2015) Greater number of group identifications is associated with healthier behaviour: evidence from a Scottish community sample. *British Journal of Health Psychology*, 20(3), pp. 466–481.
- Sanson-Fisher, R. W., Bonevski, B., Green, L. W. and D'Este, C. (2007) Limitations of the randomized controlled trial in evaluating population-based health interventions. *American Journal of Preventative Medicine*, 33(2), pp. 155-161.
- Santoni, C., Chiva Giurca, B., Li, T. M., Mulligan, H., Chilaka, J., Lazzereschi, L., Akhbari, M., Teo, M. S. Y., Massias, J., Kirtley, D. and Polley, M. (2019) Evaluating student perceptions and awareness of social prescribing. *Education For Primary Care: An Official Publication Of The Association Of Course Organisers, National Association Of GP Tutors, World Organisation Of Family Doctors*, pp. 1-7.
- Sarkies, M. N., Bowles, K. A., Skinner, E. H., Mitchell, D., Haas, R., Ho, M., Salter, K., May, K., Markham, D., O'Brien, L., Plumb, S. and Haines, T. P. (2015) Data collection methods in health services research: Hospital length of stay and discharge destination. *Applied Clinical Informatics*, 6(1), pp. 96–109.
- Saunders, M., Lewis, P. and Thornhill, A. (2011) *Research Methods for Business Students*. 5th ed. Harlow: Pearson Education.
- Sayer, A. (1992) *Method in Social Science: A realist approach*. 2nd ed. London: Routledge.
- Sayer, A. (2000) *Realism and Social Science*. London: SAGE Publications.
- Scholl, I., Zill, J. M., Härter, M. and Dirmaier, J. (2014) An integrative model of patient-centeredness - A systematic review and concept analysis. *PLoS One*, 9(9), pp. e107828.
- Scotland, J. (2012) Exploring the philosophical underpinnings of research: relating ontology and epistemology to the methodology and methods of the scientific, interpretive, and critical research paradigms *English Language Teaching*, 5(9), pp. 9-16.
- Scottish Development Centre for Mental Health (2007) *Developing Social Prescribing and Community Referrals for Mental Health in Scotland*. Edinburgh. Available at: <http://www.artshealthresources.org.uk/wp-content/uploads/2017/01/2007-CDS-Developing-social-prescribing-and-community-referrals-in-Scotland.pdf> [Accessed 5 February 2018].
- Scottish Government (2012) *Links Project Report. Developing connections between general practices and their communities*. Edinburgh. Available at: <https://www.gov.scot/publications/links-project-report-developing-connections-between-general-practices-communities/pages/19/> [Accessed 10 December 2018].
- Seeman, T. E. (1996) Social ties and health: the benefits of social integration. *Annals of Epidemiology*, 6(5), pp. 442-451.
- Shaddick, L. (2019) *GPs to Prescribe Dance Lessons and Art Classes on the NHS for 'Modern-Life Scourges'*. Available at: <https://news.sky.com/story/gps-to-prescribe-dance-lessons-and-art-classes-on-the-nhs-for-modern-life-scourges-11619966> [Accessed 19 March 2019].

- Shankardass, K., Solar, O., Murphy, K., Greaves, L. and O'Campo, P. (2012) A scoping review of intersectoral action for health equity involving governments. *International journal of public health*, 57(1), pp. 25-33.
- Shapiro, T. L. (2007) Generalizing as morally implicative practice: A critical realist approach. *Communication Methods and Measures*, 1(3), pp. 191-206.
- Sharp, D., Lorenc, A., Feder, G., Little, P., Hollinghurst, S., Mercer, S. and MacPherson, H. (2018a) 'Trying to put a square peg into a round hole': a qualitative study of healthcare professionals' views of integrating complementary medicine into primary care for musculoskeletal and mental health comorbidity. *BMC Complementary And Alternative Medicine*, 18(1), pp. 290-290.
- Sharp, D., Lorenc, A., Little, P., Mercer, S. W., Hollinghurst, S., Feder, G. and MacPherson, H. (2018b) Complementary medicine and the NHS: Experiences of integration with UK primary care. *European Journal of Integrative Medicine*, 24pp. 8-16.
- Shatin, L., Kotter, W. and Longmore, G. (1967) Psychosocial prescription for music therapy in hospitals. *Diseases Of The Nervous System*, 28(4), pp. 231-233.
- Shaw, S., Rosen, R. and Rumbold, B. (2011) *An Overview of Integrated Care in the NHS: What is integrated care?* London. Available at: <https://www.nuffieldtrust.org.uk/files/2017-01/what-is-integrated-care-report-web-final.pdf> [Accessed 27 March 2020].
- Shenton, A. K. (2004) Strategies for ensuring trustworthiness in qualitative research projects. *Education for Information*, 22(2), pp. 63-75.
- Short, M. E., Goetzel, R. Z., Pei, X., Tabrizi, M. J., Ozminkowski, R. J., Gibson, T. B., DeJoy, D. M. and Wilson, M. G. (2009) How accurate are self-reports? Analysis of self-reported health care utilization and absence when compared with administrative data. *Journal Of Occupational And Environmental Medicine*, 57(7), pp. 786-796.
- Shortell, S. M., Gillies, R. R. and Anderson, D. A. (1994) The new world of managed care: creating organized delivery systems. *Health Affairs*, 13(5), pp. 46-64.
- Shortell, S. M., Gillies, R. R., Anderson, D. A., Erickson, K. M. and Mitchell, J. B. S. F. J. (1996) Remaking health care in America. *Hospitals & Health Networks*, 70(6), pp. 43-48.
- Shorten, A. and Smith, J. (2017) Mixed methods research: Expanding the evidence base. *Evidence-Based Nursing*, 20(1), pp. 74-75.
- Shuy, R. W. (2002) In-person versus telephone interviewing. In: J. F. Gubrium and J. A. Holstein, eds. *Handbook of Interview Research: Context and Method*. Thousand Oaks, CA: SAGE Publications, pp. 537-555.
- Siegel, S., Alderwick, H., Vuik, S., Ham, C. and Patel, H. (2016) *Healthy Populations: Designing strategies to improve population health*. Doha, Qatar. Available at: https://www.imperial.ac.uk/media/imperial-college/institute-of-global-health-innovation/Healthy_Populations_Report.pdf [Accessed 8 April 2020].
- Siegrist, J. and Marmot, M. (2006) *Social Inequalities in Health: New evidence and policy implications*. Oxford: Oxford University Press.
- Silke, A., Taylor, S., Connor, J., Davidson, J. and Grayson, I. (2018) *Innovating for Improvement: Live well coaches in primary care*. London. Available at: [https://www.health.org.uk/sites/default/files/IfI%20R5%20Greenwich_FINAL%20\(website\).pdf](https://www.health.org.uk/sites/default/files/IfI%20R5%20Greenwich_FINAL%20(website).pdf) [Accessed 1 June 2020].
- Silverman, D. (2015) *Interpreting Qualitative Data*. 5th ed. London: SAGE Publications.
- Simmons, P., Hawley, C. J., Gale, T. M. and Sivakumaran, T. (2010) Service user, patient, client, user or survivor: describing recipients of mental health services. *The Psychiatrist*, 34(1), pp. 20-23.
- Singh, T. and Sahu, S. (2016) *Research Methodology*: SBPD Publications.
- Skivington, K., Smith, M., Chng, N. R., Mackenzie, M., Wyke, S. and Mercer, S. W. (2018a) Delivering a primary care-based social prescribing initiative: a qualitative study of the benefits and challenges. *British Journal of General Practice*, 68(672), pp. e487-e494.

- Skivington, K., Smith, M., Chng, N. R., Mackenzie, M., Wyke, S. and Mercer, S. W. (2018b) Delivering a primary care-based social prescribing initiative: a qualitative study of the benefits and challenges. *The British Journal Of General Practice: The Journal Of The Royal College Of General Practitioners*, 68(672), pp. e487-e494.
- Smailes, S. and Street, C. (2011) *The Health Studies Companion*: Palgrave Macmillian.
- Smith, B. (2018) Generalizability in qualitative research: misunderstandings, opportunities and recommendations for the sport and exercise sciences. *Qualitative Research in Sport, Exercise and Health*, 10(1), pp. 137-149.
- Smith, E. (2008) *Using Secondary Data in Educational and Social Research*. New York, NY: McGraw-Hill Education.
- Smith, J. A. and Osborn, M. (2015) Interpretative phenomenological analysis. In: J. A. Smith, ed. *Qualitative Psychology: A Practical Guide to Research Methods*. London: SAGE Publications, pp. 25-53.
- Smith, M. L., Towne, S. D., Herrera-Venson, A., Cameron, K., Horel, S. A., Ory, M. G., Gilchrist, C. L., Schneider, E. C., DiCocco, C. and Skowronski, S. (2018) Delivery of Fall Prevention Interventions for At-Risk Older Adults in Rural Areas: Findings from a National Dissemination. *Int J Environ Res Public Health*, 15(12), pp.
- Smith, M. S., Lawrence, V., Sadler, E. and Easter, A. (2019a) Barriers to accessing mental health services for women with perinatal mental illness: systematic review and meta-synthesis of qualitative studies in the UK. *BMJ Open*, 9pp. e024803.
- Smith, R. (2002) The biopsychosocial revolution. *Journal Of General Internal Medicine*, 17(1), pp. 309–310.
- Smith, T. O., Jimoh, O. F., Cross, J., Allan, L., Corbett, A., Sadler, E., Khondoker, M., Whitty, J., Valderas, J. M. and Fox, C. (2019b) Social Prescribing Programmes to Prevent or Delay Frailty in Community-Dwelling Older Adults. *Geriatrics (Basel)*, 4(4), pp.
- South, J., Higgins, T. J., Woodall, J. and White, S. M. (2008) Can social prescribing provide the missing link? *Primary Health Care Research and Development*, 9(4), pp. 310-318.
- South Liverpool Citizens Advice and Liverpool Clinical Commissioning Group (2017) *Case Study: Advice on prescription*. Liverpool. Available at: <http://www.nspa.org.uk/wp-content/uploads/2017/10/Case-study-Advice-on-Prescription.pdf> [Accessed 2 October 2018].
- Southby, K. and Gamsu, M. (2018) Factors affecting general practice collaboration with voluntary and community sector organisations. *Health & Social Care In The Community*, 26(3), pp. e360-e369.
- Stake, R. E. (1995) *The Art of Case Study Research*: SAGE Publications.
- Stange, K. and Ferrer, R. (2009) The paradox of primary care. *The Annals of Family Medicine*, 7(4), pp. 293-299.
- Stange, K. C. (2009) The problem of fragmentation and the need for integrative solutions. *The Annals of Family Medicine*, 7(2), pp. 100-103.
- Stanner, S. (2001) Health survey for England 1999: the health of minority ethnic groups. *Nutrition Bulletin*, 26(3), pp. 227-230.
- Starfield, B., Hyde, J., Gervas, J. and Heath, I. (2008) The concept of prevention: A good idea gone astray? *Journal of Epidemiology and Community Health*, 62(7), pp. 580-583.
- Starfield, B., Shi, L. and Macinko, J. (2005) Contribution of primary care to health systems and health. *Milbank Quarterly*, 83(3), pp. 457–502.
- Steadman, K., Thomas, R. and Donalaja, V. (2017) *Social Prescribing: A pathway to work?* London. Available at: http://www.theworkfoundation.com/wp-content/uploads/2017/02/412_Social_prescribing.pdf [Accessed 21 March 2018].
- Steigman, P. J., Pickett, S. A., Diehl, S. M., Fox, A., Grey, D. D., Shipley, P. and Cook, J. A. (2014) Psychiatric symptoms moderate the effects of mental illness self-management in a

- randomized controlled trial. *The Journal Of Nervous And Mental Disease*, 202(3), pp. 193-199.
- Stein, K. V. and Rieder, A. (2009) Integrated care at the crossroads - defining the way forward. *International Journal Of Integrated Care*, 9pp. e10.
- Step toe, A., Shankar, A., Demakakos, P. and Wardle, J. (2013) Social Isolation, Loneliness, and All-Cause Mortality in Older Men and Women. *National Academy of Sciences of the United States of America*, 110(15), pp. 5797-5801.
- Stevenson, C., Wilson, I., McNamara, C., Wakefield, J., Kellezi, B. and Bowe, M. (2019) *Social Prescribing: A practice in need of a theory*. British Journal of General Practice. Available at: <https://bjgp.org/content/social-prescribing-practice-need-theory> [Accessed 24 March 2020].
- Stickley, T. and Eades, M. (2013) Arts on prescription: a qualitative outcomes study. *Public Health*, 127(8), pp. 727-734.
- Stickley, T. and Hui, A. (2012a) Social prescribing through arts on prescription in a U.K. city: participants' perspectives (part 1). *Public Health*, 126(7), pp. 574-579.
- Stickley, T. and Hui, A. (2012b) Social prescribing through arts on prescription in a U.K. city: referrers' perspectives (part 2). *Public Health*, 126(7), pp. 580-586.
- Stodel, M. (2015) But what will people think? Getting beyond social desirability bias by increasing cognitive load. *International Journal of Market Research*, 57(2), pp. 313-322.
- Stokes-Lampard, H., Stodel, M., Fisher, D., Allirahaj, D. and Thomas, M. (2018) *GP Forward View: Assessment of progress. Year 2*. London. Available at: <file:///C:/Users/ID917072/Downloads/RCGP-annual-assessment-GP-forward-view-year2-aug-2018.PDF> [Accessed 24 April 2019].
- Ströhle, A. (2009) Physical activity, exercise, depression and anxiety disorders. *Journal of Neural Transmission*, 116(6), pp. 777-784.
- Sumner, R. C., Crone, D. M., Baker, C., Hughes, S., Loughren, E. A. and James, D. V. B. (2019) Factors associated with attendance, engagement and wellbeing change in an arts on prescription intervention. *Journal Of Public Health (Oxford, England)*, pp.
- Suter, E., Oelke, N. D., Adair, C. E. and Armitage, G. D. (2009) Ten key principles for successful health systems integration. *Healthcare quarterly*, 13(Spec No), pp. 16-23.
- SYHA. (2020) *My Best Life: Social prescribing*. Available at: <https://www.syha.co.uk/wp-content/uploads/A5-Brochure-My-Best-Life-Social-Prescribing.pdf> [Accessed 28 October 2020].
- Tashakkori, A. and Teddlie, C. (1998) *Mixed Methodology: Combining qualitative and quantitative approaches*. Thousand Oaks: SAGE Publications.
- Taylor, D., Family, H., Taylor, A. and Jones, M. (2017) Community pharmacists' possible role in social prescribing for people with poor mental health. *International Journal of Pharmacy Practice*, 25pp. 6.
- Taylor, D. A., Nicholls, G. M. and Taylor, A. D. J. (2019) Perceptions of Pharmacy Involvement in Social Prescribing Pathways in England, Scotland and Wales. *Pharmacy*, 7(1), pp.
- Taylor, P., Orme, J., Powell, J., Harrison, T. and M, G. (2003) The lay contribution to public health. *Public Health for the 21st Century*. Maidenhead: Open University Press, pp. 128-144.
- Teddlie, C. and Tashakkori, A. (2009) *Foundations of Mixed Methods Research: Integrating quantitative and qualitative approaches in the social and behavioral sciences*. London: SAGE Publications.
- Teddlie, C. and Yu, F. (2007) Mixed methods sampling. *Journal of Mixed Methods Research*, 1(1), pp. 77-100.
- Tesch, R. (1990) *Qualitative Research: Analysis types & software tools*. London: Routledge.
- Teuton, J. (2015) *Social Prescribing for Mental Health: Background paper*. Scotland. Available at: <http://www.healthscotland.scot/media/2067/social-prescribing-for-mental-health-background-paper.pdf> [Accessed 18 December 2018].

- The Health Foundation (2015a) *Shine 2014 Final Report. Social Prescribing: Integrating GP and community assets for health*. London. Available at: <file:///C:/Users/786843/Downloads/City%20and%20Hackney%20CCG%20final%20report.pdf> [Accessed 10 June 2020].
- The Health Foundation (2015b) *Shine 2014 Final Report: Social Prescribing: Integrating GP and community assets for health*. London. Available at: <file:///C:/Users/786843/Downloads/City%20and%20Hackney%20CCG%20final%20report.pdf> [Accessed 10 June 2020].
- The Health Foundation (2016) *Person-Centred Care Made Simple: What everyone should know about person-centred care*. London. Available at: <https://www.health.org.uk/sites/default/files/PersonCentredCareMadeSimple.pdf> [Accessed 10 July 2020].
- The King's Fund. (2017) *What is Social Prescribing?* Available at: <https://www.kingsfund.org.uk/publications/social-prescribing> [Accessed 27 February 2018].
- The Office for National Statistics (2015) *Measuring National Well-being: Insights into loneliness, older people and well-being*. London. Available at: <https://www.ons.gov.uk/peoplepopulationandcommunity/wellbeing/articles/measuringnationalwellbeing/2015-10-01#loneliness-and-well-being> [Accessed 13 February 2018].
- The Society of Radiographers (2018) *Section 1 – Principles of Good Prescribing Practice. Practice Guidance for Radiographer Independent and/or Supplementary Prescribers*. Available at: <https://www.sor.org/learning/document-library/practice-guidance-radiographer-independent-and-or-supplementary-prescribers/section-1-principles-good> [Accessed 10 October 2018].
- Thirlwall, C. (2015) *Healthy Connections Stewartry: Final evaluation. 'Test of Change' project report*. Available at: http://www.nhsdg.scot.nhs.uk/Departments_and_Services/Putting_You_First/PYF_Files/Social_Prescribing.pdf [Accessed 10 July 2016].
- Thiru, K., Hassey, A. and Sullivan, F. (2003) Systematic review of scope and quality of electronic patient record data in primary care. *BMJ*, 326(7398), pp. 1070.
- Thom, D. H., Ghorob, A., Hessler, D., De Vore, D., Chen, E. and Bodenheimer, T. A. (2013) Impact of peer health coaching on glycemic control in low-income patients with diabetes: A randomized controlled trial. *The Annals of Family Medicine*, 11(2), pp. 137-144.
- Thompson, C. (2015) *Meeting the Challenges of an Ageing Population*. London. Available at: <https://www.england.nhs.uk/blog/catherine-thompson/> [Accessed 14 June 2020].
- Thomson, L., Camic, P. M. and Chatterjee, H. (2015) *Social Prescribing: A review of community referral schemes*. Canterbury. Available at: http://create.canterbury.ac.uk/15655/1/Social_Prescribing_Review_2015.pdf [Accessed 11 June 2018].
- Thomson, L. J., Lockyer, B., Camic, P. M. and Chatterjee, H. J. (2018) Effects of a museum-based social prescription intervention on quantitative measures of psychological wellbeing in older adults. *Perspectives In Public Health*, 138(1), pp. 28-38.
- Thorne, S. (2008) Data analysis in qualitative research. In: N. Cullum et al., eds. *Evidence Based Nursing*. Oxford: Blackwell, pp. 93-100.
- Thriemer, K., Ley, B., Ame, S. M., Puri, M. K., Hashim, R., Chang, N. Y., Salim, A., Ochiai, R. L., EWierzba, T. F., Clemens, J. D., von Seidlein, L., SDeen, J. L., Ali, A. M. and Ali, M. (2012) Replacing paper data collection forms with electronic data entry in the field: Findings from a study of community-acquired bloodstream infections in Pemba, Zanzibar. *BMC Research Notes*, 5(1), pp. 113.
- Tierney, S., Wong, G. and Mahtani, K. R. (2019) Current understanding and implementation of 'care navigation' across England: a cross-sectional study of NHS clinical commissioning groups. *The*

- British Journal Of General Practice: The Journal Of The Royal College Of General Practitioners*, 69(687), pp. e675-e681.
- Tobin, G. A. and Begley, C. M. (2004) Methodological rigour within a qualitative framework. *Journal Of Advanced Nursing*, 48(4), pp. 388-396.
- Todd, C., Camic, P. M., Lockyer, B., Thomson, L. J. M. and Chatterjee, H. J. (2017) Museum-based programs for socially isolated older adults: Understanding what works. *Health and Place*, 48pp. 47-55.
- Toleikyte, L. and Salway, S. (2018) *Health Inequalities: Reducing ethnic inequalities*. London. Available at: <https://www.gov.uk/government/publications/health-inequalities-reducing-ethnic-inequalities> [Accessed 24 August 2020].
- Torjesen, I. (2016) Social prescribing could help alleviate pressure on GPs. *BMJ*, 352(i1436), pp. <https://doi.org/10.1136/bmj.i1436>
- Torrens, L. (2012) The social cure: Identity, health and well-being. *Neuropsychological Rehabilitation*, 22(6), pp. 942-943.
- Tripathy, P. and Tripathy, P., K (2015) *Fundamentals of Research. A dissective view*. London: Anchor Academic Publishing.
- Trochim, W. and Donnelly, J. (2006) *The Research Methods Knowledge Base*. 3rd ed. Ohio: Atomic Dog Publishing.
- Tsasis, P., Evans, J. M. and Owen, S. (2012) Reframing the challenges to integrated care: A complex-adaptive systems perspective. *International Journal Of Integrated Care*, 18(12), pp. e190.
- Ukoumunne, O. C., Gulliford, M. C., Chinn, S., Sterne, J. A., Burney, P. G. and Donner, A. B. (1999) Methods in health service research. Evaluation of health interventions at area and organisation level. *BMJ*, 319(7206), pp. 376-379.
- University College London (2014) *The Marmot Review: National and local policies to redress social inequalities in health, Research Excellence Framework*. Available at: <https://www.ucl.ac.uk/impact/case-studies/2014/dec/marmot-review-national-and-local-policies-redress-social-inequalities-health> [Accessed 5 March 2020].
- University of Westminster (2017) *Making Sense of Social Prescribing*. London. Available at: <https://westminsterresearch.westminster.ac.uk/download/f3cf4b949511304f762bdec137844251031072697ae511a462eac9150d6ba8e0/1340196/Making-sense-of-social-prescribing%202017.pdf> [Accessed 23 March 2020].
- Vahdat, S., Hamzehgardeshi, L., Hessam, S. and Hamzehgardeshi, Z. (2014) Patient involvement in health care decision making: a review. *Iranian Red Crescent Medical Journal*, 16(1), pp. e12454-e12454.
- Valentijn, P. (2016) *Rainbow of Chaos: A study into the theory and practice of integrated primary care*. *International Journal Of Integrated Care*. The Netherlands, Tilburg University. 195.
- Valentijn, P. P., Biermann, C. and Bruijnzeels, M. A. (2016) Value-based integrated (renal) care: setting a development agenda for research and implementation strategies. *BMC Health Services Research*, 16(1), pp. 330.
- Valentijn, P. P., Boesveld, I. C., Van der Klauw, D. M., Ruwaard, D., Struijs, J. N., Molema, J. J. W., Bruijnzeels, M. A. and Vrijhoef, H. J. M. (2015) Towards a taxonomy for integrated care: A mixed-methods study. *International Journal Of Integrated Care*, 15(1), pp. 1-18.
- Valentijn, P. P., Schepman, S. M., Opheij, W. and Bruijnzeels, M. A. (2013) Understanding integrated care: A comprehensive conceptual framework based on the integrative functions of primary care. *International Journal Of Integrated Care*, 22(13), pp. e010.
- van de Mortel, T. F. (2008) Faking it: social desirability response bias in selfreport research. *Australian Journal of Advanced Nursing*, 25(4), pp. 40-48.
- Varcoe, C., Browne, A. J., Wong, S. and Smye, V. L. (2009) Harms and benefits: Collecting ethnicity data in a clinical context. *Social Science & Medicine*, 68(9), pp. 1659-1666.

- Victor, C. R. (2003) *Loneliness, Social Isolation and Living Alone in Later Life*. Sheffield. Available at: <http://www.researchcatalogue.esrc.ac.uk/grants/L480254042/read> [Accessed 13 March 2018].
- Victor, C. R. and Yang, K. M. (2012) The prevalence of loneliness among adults: a case study of the United Kingdom. *The Journal Of Psychology*, 146(1-2), pp. 85-104.
- Vlassoff, C. (2007) Gender differences in determinants and consequences of health and illness. *Journal of Health, Population, and Nutrition*, 25(1), pp. 47-61.
- Vogel, L. (2019) Why do patients often lie to their doctors? *Canadian Medical Association Journal*, 19(4), pp. E115.
- Vogelpoel, N. and Jarrold, K. (2014) Social prescription and the role of participatory arts programmes for older people with sensory impairments. *Journal of Integrated Care*, 22(2), pp. 39-50.
- Vogl, S. (2013) Telephone versus face-to-face interviews: mode effect on semistructured interviews with children. *Sociological Methodology*, 43(1), pp. 133-177.
- Waddington-Jones, C., King, A. and Burnard, P. (2019) Exploring Wellbeing and Creativity Through Collaborative Composition as Part of Hull 2017 City of Culture. *Frontiers In Psychology*, 10pp. 548-548.
- Wade, D. T. and Halligan, P. W. (2011) Do biomedical models of illness make for good healthcare systems? *BMJ*, 329(7479), pp. 1398–1401.
- Wagner, C., Knight, K., Steptoe, A. and Wardle, J. (2007) Functional health literacy and health-promoting behaviour in a national sample of British adults. *Journal of Epidemiology and Community Health*, 61(12), pp. 1086–1090.
- Wagner, E. H. (1998) Chronic disease management: What will it take to improve care for chronic illness? . *Effective Clinical Practice*, 1(1), pp. 2-4.
- Wagner, E. H., Davis, C., Schaefer, J., Von Korff, M. and Austin, B. (1999) A survey of leading chronic disease management programs: are they consistent with the literature? *Managed Care Quarterly*, 7(3), pp. 56-66.
- Wagner, K. A., Wickham Lee, F. and Glaser, J. P. (2009) *Health Care Information Systems*. London: John Wiley and Sons Inc.
- Wagstaff, A. and Van Doorslaer, E. (2000) Income inequality and health: what does the literature tell us? *Annual Review Of Public Health*, 21(1), pp. 543-567.
- Wahlbeck, K., Cresswell-Smith, J., Haaramo, P. and Parkkonen, J. (2017) Interventions to mitigate the effects of poverty and inequality on mental health. *Social Psychiatry and Psychiatric Epidemiology*, 52(5), pp. 505-514.
- Wainwright, S. P. and Forbes, A. (2000) Philosophical problems with social research on health inequalities. *Health Care Analysis*, 8(3), pp. 259-277.
- Wakefield, J. R. H., Bowe, M., Kellezi, B., McNamara, N. and Stevenson, C. (2019) When groups help and when groups harm: Origins, developments, and future directions of the “Social Cure” perspective of group dynamics. *Social and Personality Psychology Compass*, 13(3), pp. e12440.
- Wallett, R. (2016) *We Must Evolve our Terminology to Reflect our Approach to Care: Let’s start with “service user”*. Available at: <https://www.nursingtimes.net/students/we-must-evolve-our-terminology-to-reflect-our-approach-to-care-lets-start-with-service-user-01-02-2016/> [Accessed 30 November 2020].
- Wammes, J. J., Jeurissen, P. P., Verhoef, L. M., Assendelft, W. J., Westert, G. P. and Faber, M. J. (2014) Is the role as gatekeeper still feasible? A survey among Dutch general practitioners. *Family Practice*, 31(5), pp. 538-544.
- Wang, J. and Geng, L. (2019) Effects of Socioeconomic Status on Physical and Psychological Health: Lifestyle as a Mediator. *International Journal Of Environmental Research And Public Health*, 16(2), pp. 281.
- Weiner, B. J. (2009) A Theory of Organizational Readiness for Change. *Implementation Science*, 4(1), pp. 67.

- Weiskopf, N. G. and Weng, C. (2013) Methods and dimensions of electronic health record data quality assessment: enabling reuse for clinical research. *Journal of the American Medical Informatics Association*, 20(1), pp. 144-151.
- Wessex Academic Science Network (2017) *Social Prescribing in Wessex: Understanding its impact and supporting spread*. Available at: <https://r-outcomes.com/wp-content/uploads/2017/06/Wessex-Social-Prescribing.pdf> [Accessed 17 October 2017].
- Westerhof, J. G. and Keyes, L. M. C. (2010) Mental illness and mental health: the two continua model across the lifespan. *Journal of Adult Development*, 17(2), pp. 110-119.
- White, J., Kinsella, K. and South, J. (2010) *An Evaluation of Social Prescribing Health Trainers in South and West Bradford, Yorkshire and Humber*. Available at: https://d76388a5-a-62cb3a1a-sites.googlegroups.com/site/healthtrainersengland/bradford/BradfordSPHreport2010.pdf?attachauth=ANoY7coFxrG5vWJvuTNFNgoMP4THHVkLjsW-IA1cgr-CvDXR2W7xnXzM5SVMle1ZC1sJAXUG4GOJpF4SJlyN_SE47AAsXhzVaMrYvNhHdOqt7ta6VqpcN5V1ZVXz_qx7USvSEx0pikPGe0SV-akJ2SHgu8lfRzY7dx4gqtDtCtula9QNGHI_HBbrTsVaeHFFv8Tk2znPx1xCNT8kGmb2U-O-ZyK94xd6Zj0mrkRJ9Pocgv0EE5Dfzwd99umliLJZsThrXfKov&attredirects=0 [Accessed 7 March 2019].
- White, J. M. (2012) *Social Prescribing: The perspectives of service users, providers and prescribers.*, Glasgow Caledonian University.
- White, J. M., Cornish, F. and Kerr, S. (2017) Front-line perspectives on 'joined-up' working relationships: a qualitative study of social prescribing in the west of Scotland. *Health & Social Care In The Community*, 25(1), pp. 194-203.
- White, M. and Salamon, E. (2011) *An Interim Evaluation of the 'Arts For Wellbeing' Social Prescribing Scheme in County Durham*. Durham. Available at: <http://www.artsandhealth.ie/wp-content/uploads/2011/08/ArtsForWell-beingevaluationFINAL.pdf> [Accessed 8 January 2018].
- Whitelaw, S., Thirlwall, C., Morrison, A., Osborne, J., Tattum, L. and Walker, S. (2017) Developing and implementing a social prescribing initiative in primary care: Insights into the possibility of normalisation and sustainability from a UK case study. *Prim Health Care Res Dev*, 18(2), pp. 112-121.
- Whittington, W., Nolan, K., Lewis, N. and Torres, T. (2015) Pursuing the triple aim: The first 7 years. *Milbank Quarterly*, 93(2), pp. 263-300.
- WHO (1978) *Declaration of Alma-Ata*. Geneva. Available at: https://www.who.int/publications/almaata_declaration_en.pdf [Accessed 21 April 2020].
- WHO (2016a) *Framework on Integrated, People-Centred Health Services. In: Report by the Secretariat. Sixty-Ninth World Health Assembly*. Geneva. Available at: http://apps.who.int/gb/ebwha/pdf_files/WHA69/A69_39-en.pdf?ua [Accessed 25 March 2020].
- WHO (2016b) *Integrated Care Models: An overview*. Available at: http://www.euro.who.int/_data/assets/pdf_file/0005/322475/Integrated-care-models-overview.pdf [Accessed 25 March 2020].
- Wigfield, A., Alden, S., Kispeter and Clarke, T. (2015) *Age UK's Fit for the Future 'Social Prescribing' Extension Project: Evaluation report*. Leeds. Available at: <https://www.ageuk.org.uk/globalassets/age-uk/documents/reports-and-publications/evaluation-reports/fftf-extension-project-final-evaluation-report-july-2015-docx.pdf> [Accessed 14 June 2018].
- Wihlman, U., Lundborg, C. S., Axelsson, R. and Holmström, I. (2008) Barriers of inter-organisational integration in vocational rehabilitation. *International Journal Of Integrated Care*, 8pp. e52.
- Wildman, J. and Wildman, J. M. (2019) Combining Health and Outcomes Beyond Health in Complex Evaluations of Complex Interventions: Suggestions for Economic Evaluation. *Value In Health: The Journal Of The International Society For Pharmacoeconomics And Outcomes Research*, 22(5), pp. 511-517.

- Wildman, J. M., Moffatt, S., Penn, L., O'Brien, N., Steer, M. and Hill, C. (2019a) Link workers' perspectives on factors enabling and preventing client engagement with social prescribing. *Health & Social Care In The Community*, 27(4), pp. 991-998.
- Wildman, J. M., Moffatt, S., Steer, M., Laing, K., Penn, L. and O'Brien, N. (2019b) Service-users' perspectives of link worker social prescribing: a qualitative follow-up study. *BMC Public Health*, 19(1), pp. 98.
- Willems, D. L. (2001) Balancing rationalities: gatekeeping in health care. *Journal Of Medical Ethics*, 27(1), pp. 25-29.
- Wilson, J. and Read, J. (2001) What prevents GPs from using outside resources for women experiencing depression? A New Zealand study. *Family Practice*, 18(1), pp. 84-86.
- Wilson, R. S., Krueger, K. R., Arnold, S. E., Schneider, J. A., Kelly, J. F., Barnes, L. L., Tang, Y. and Bennett, D. A. (2007) Loneliness and risk of Alzheimer disease. *Archives Of General Psychiatry*, 64(2), pp. 234-240.
- Wistow, J., Blackman, T., Byrne, D. and Wistow, G. (2015) *Studying Health Inequalities: An applied approach*. Bristol, UK: Policy Press.
- Wood, S. (2014) *How Person-Centred is our Health Service?* Available at: <https://www.nuffieldtrust.org.uk/news-item/how-person-centred-is-our-health-service> [Accessed 26 November 2020].
- Woodall, J., Trigwell, J., Bunyan, A.-M., Raine, G., Eaton, V., Davis, J., Hancock, L., Cunningham, M. and Wilkinson, S. (2018) Understanding the effectiveness and mechanisms of a social prescribing service: a mixed method analysis. *BMC Health Services Research*, 18(1), pp. 604-604.
- Woodhall, H. and South, J. (2005) *The Evaluation of the CHAT Social Prescribing Scheme in Bradford South & West PCT*. Leeds Metropolitan University, Leeds. Available at: <http://www.leedsmet.ac.uk/hss/docs/FINALREPORT.pdf> [Accessed 24 October 2015].
- Woolf, G. (n.d.) *Tackling Health Inequalities - Bromley by Bow Centre*. Available at: <http://www.rcgp.org.uk/clinical-and-research/bright-ideas/tackling-health-inequalities-bromley-by-bow-centre.aspx> [Accessed 22 February 2018].
- World Health Organisation (2005) *Mental Health Declaration for Europe. Facing the challenges, building solutions*. Geneva. Available at: [Accessed 20 September 2016].
- World Health Organisation (2010) *Developing Guidance for Health Protection in the Built Environment -Mitigation and Adaptation Responses: Meeting report. International Workshop on Housing, Health and Climate Change*. Geneva. Available at: http://www.who.int/hia/house_report.pdf?ua=1 [Accessed 20 January 2018].
- World Health Organization (2009) *Global Health Risks: Mortality and burden of disease attributable to selected major risks*. Geneva: World Health Organization.
- World Health Organization (2010) *A Conceptual Framework for Action on the Social Determinants of Health*. Geneva. Available at: http://www.who.int/sdhconference/resources/ConceptualframeworkforactiononSDH_eng.pdf [Accessed 11 September 2018].
- World Health Organization (2013) *Mental Health Action Plan*. Geneva. Available at: https://apps.who.int/iris/bitstream/handle/10665/89966/9789241506021_eng.pdf [Accessed 17 November 2020].
- Wright, J. D. (2015) *International Encyclopedia of the Social & Behavioral Sciences*. 2nd ed. London: Science Direct.
- Wylie, A. and Leedham-Green, K. (2017) Health promotion in medical education: lessons from a major undergraduate curriculum implementation. *Education For Primary Care: An Official Publication Of The Association Of Course Organisers, National Association Of GP Tutors, World Organisation Of Family Doctors*, 28(6), pp. 325-333.
- Wynia, M. K., Ivey, S. L. and Hasnain-Wynia, R. (2010) Collection of data on patients' race and ethnic group by physician practices. *New England Journal of Medicine*, 362(9), pp. 846-850.

- Yin, R. K. (2011) *Applications of Case Study Research*: SAGE Publications.
- Zachariadis, M., Scott, S. and Barrett, M. (2013) Methodological implications of critical realism for mixed-methods research. *Management Information Systems Quarterly*, 37(3), pp. 855-880.
- Zikmund, W. G., Babin, B. J., Carr, J. C. and Griffin, M. (2013) *Business Research Methods*. Massachusetts: Cengage Learning.
- Zimmerman, B., Lindberg, C. and Plsek, P. (2000) Edgeware: insights from complexity science for health care leaders. *Academic Medicine*, 75(11), pp. 1102-1106.
- Zimmerman, E. B., Woolf, S. H. and Haley, A. (2015) Understanding the relationship between education and health. In: D. H. David, M. L. Spittel and R. M. Kaplan, eds. *Population Health: Behavioral and Social Science Insights*. Rockville, MD: Agency for Healthcare Research and Quality and Office of Behavioral and Social Sciences Research, pp. 347-385.
- Zunzunegui, M.-V., Alvarado, B. E., Del Ser, T. and Otero, A. (2003) Social networks, social integration, and social engagement determine cognitive decline in community-dwelling Spanish older adults. *The Journals of Gerontology*, 58(2), pp. S93-S100.

Appendices

Appendix 1: Study I Ethical Approval



Ref: AW/555/2016

Address for Correspondence

Faculty of Health, Education and Life Science Research Office
Faculty of Health, Education and Life Sciences
Birmingham City University
Westbourne Road
Birmingham B15 3TN
Tel: 0121 331 6172
Email: HELS_Ethics@bcu.ac.uk

17th June 2016

Jessica Runacres



Dear Jessica,

Re: Secondary Quantitative Data Analysis of Routinely Collected Administration Data from a Model of Social Prescribing – application 555

Thank you for your amended application regarding the above. I am happy to take Chair's Action and approve the study, which means that you may begin your research.

The Committee's opinion is based on the information supplied in your application. If you wish to make any substantial changes to the research please contact the Committee and provide details of what you propose to alter. A substantial change is one that is likely to affect the:

- safety and well-being of the participants;
- scientific value of the study;
- conduct or management of the study.

The Committee should also be notified of any serious adverse effects arising as a result of this research. The Committee is required to keep a favourable opinion under review in the light of progress reports.

I wish you every success with your study.

Yours sincerely,

Dr Alex Wade
Moderator - Faculty of Health, Education and Life Sciences Academic Ethics Committee

Faculty of Health, Education and Life Sciences, Birmingham City University, City South Campus, Edgbaston, Birmingham, B15 3TN
University Switchboard T: +44 (0) 121 331 5000 W: www.bcu.ac.uk

Appendix 2: Study II Ethical Approval (General Practitioners)



Ref: CB/611/2016

Address for Correspondence

Faculty of Health, Education and Life Science Research Office
Faculty of Health, Education and Life Sciences
Birmingham City University
Westbourne Road
Birmingham B15 3TN
Tel: 0121 331 6172
Email: HELS_Ethics@bcu.ac.uk

3rd August 2016

Miss Jessica Runacres
School of Health
Birmingham City University

Dear Jessica

**Re: Explaining GPs Perspective of Social Prescribing: Qualitative Semi-structured Interviews.
Application: 611**

Thank you for your amended application regarding the above. I am happy to take Chair's Action and approve the study, which means that you may begin your research.

The Committee's opinion is based on the information supplied in your application. If you wish to make any substantial changes to the research please contact the Committee and provide details of what you propose to alter. A substantial change is one that is likely to affect the:

- safety and well-being of the participants;
- scientific value of the study;
- conduct or management of the study.

The Committee should also be notified of any serious adverse effects arising as a result of this research. The Committee is required to keep a favourable opinion under review in the light of progress reports.

I wish you every success with your study.

Yours sincerely,

Dr. Carolyn Blackburn

Deputy Chair, Faculty Academic Ethics Committee

Appendix 3: Study II Ethical Approval (Link Workers)



Faculty of Health, Education and Life Science Research Office

Faculty of Health, Education and Life Sciences

Birmingham City University

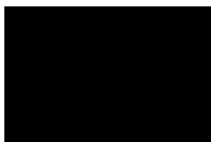
Westbourne Road

Birmingham
B15 3TN

HELS_Ethics@bcu.ac.uk

04/04/2017

Miss Jessica Runacres



Dear Miss Jessica Runacres

Re: Exploring the processes involved in social prescribing from the facilitators' viewpoint - Runacres /Apr /2017 /Am /0637

Thank you for your application for approval of amendments regarding the above study. I am happy to take Chair's Action and approve the amendments which means you may continue your research.

The Committee's opinion is based on the information supplied in your application. If you wish to make any substantial changes to the research please contact the Committee and provide details of what you propose to alter. A substantial change is one that is likely to affect the

- safety and well-being of the participants;
- scientific value of the study;
- conduct or management of the study.

The Committee should also be notified of any serious adverse effects arising as a result of this research. The Committee is required to keep a favourable opinion under review in the light of progress reports.

I wish you every success with your study.

Yours sincerely,

Dr Carolyn Blackburn

On behalf of the Faculty Academic Ethics Committee

Appendix 4: Study II Ethical Approval (Service Users)



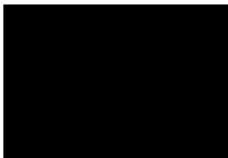
Faculty of Health, Education and Life Sciences Research Office

Faculty of Health, Education and Life Sciences
Birmingham City University
Westbourne Road
Birmingham
B15 3TN

HELS_Ethics@bcu.ac.uk

27/09/2017

Miss Jessica Runacres



Dear Jessica ,

Re: Runacres /Sep /2017 /Am /0667 - Exploring the processes involved in social prescribing from the service users' viewpoint

Thank you for your application for approval of amendments regarding the above study. I am happy to take Chair's Action and approve the amendments which means you may continue your research.

I can also confirm that any person participating in the project is covered under the University's insurance arrangements.

Please note that ethics approval only covers your activity as it has been detailed in your ethics application. If you wish to make any changes to the activity, then you must submit an Amendment application for approval of the proposed changes.

Examples of changes include (but are not limited to) adding a new study site, a new method of participant recruitment, adding a new method of data collection and/or change of Project Lead.

Please also note that the Committee should be notified of any serious adverse effects arising as a result of this activity.

If for any reason the Committee feels that the activity is no longer ethically sound, it reserves the right to withdraw its approval. In the unlikely event of issues arising which would lead to this, you will be consulted.

If you have any queries, please contact HELS_Ethics@bcu.ac.uk

I wish you every success with your activity.

Yours Sincerely,

Dr. Alex Wade

On behalf of the Faculty Academic Ethics Committee
Health, Education and Life Sciences

Appendix 5: Study I Permission of Access Letter

I give permission for Jessica Runacres to access and use [REDACTED] data, stored within the [REDACTED] system, for the purpose of research as outlined in protocol 'Secondary quantitative data analysis of routinely collected administration data from a model of social prescribing', version 2, date 06/06/2016.

[Handwritten signature]
.....

Print name

.....
Sign

[REDACTED]

Date 7.6.16.

Appendix 6: Preliminary Information Sheet (General Practitioners)



BIRMINGHAM CITY
University

Explaining GPs perspectives of social prescribing

Researchers: Jessica Runacres, Professor Lucy Land, Dr Sarahjane Jones

The concept of social prescribing has been present in the literature since the 1960's, but only recently has the phenomenon become more common as an intervention option for patients presenting in primary care with, both physical and mental, ill-health that is not suitable for traditional clinical treatments. Consequently, there is a paucity of research into health professionals' understanding of its application, patient population and effectiveness.

We will be conducting a research study to examine and explain GPs perspectives of social prescribing to explore general practitioners' (GP) understanding and opinion of social prescribing.

The aim of this study is to develop a novel understanding of general practitioners' perspectives of social prescriptions and the subsequent social interventions

The primary research objectives are:

- To ascertain general practitioners' level of knowledge and understanding of the concept of 'social prescribing'
- To explore general practitioners' attitudes towards social prescribing and the subsequent social interventions
- To examine general practitioners' views of the role of social interventions in improving health
- To determine the factors that influence general practitioners' decisions to prescribe social interventions
- To identify factors which negatively affect the prescribing of social interventions
- To identify factors which promote the use of social prescriptions and social interventions

We are looking to recruit GPs to partake in 1 semi-structured interview lasting up to 60 minutes at a mutually agreed time and place, usually at the GPs place of work. If you would like to know more, please contact Jessica Runacres.

Contact information:

Jessica Runacres

Email: jessica.runacres@bcu.ac.uk

Phone: 0121 331 6067

Appendix 7: Information Sheet (General Practitioners)



Information Sheet

You are being invited to take part in a research study being undertaken to provide evidence for part of a doctoral thesis. Before taking part, it is important for you to understand why the research is being done and what it will involve. Please take some time to read the following information carefully. Ask the researcher if there is anything that is not clear or if you would like more information.

Please take time to decide whether you wish to take part.

What is the purpose of the study?

The aim of this research is to examine social prescribing in practice with a view to producing a framework of knowledge to progress understanding and implementation. Below are the research objectives:

- To explore and quantify the underlying contributing factors to requiring a non-medical health intervention within a single service user population.
- To examine stakeholders' perceptions of SP in the context of healthcare.
- To understand the role of primary care in social prescribing.
- To investigate the role of social prescribing link workers.
- To consider the use of language surrounding social prescribing.
- To identify factors which hinder the implementation of social prescribing services.

Why have I been chosen?

You have been chosen because you are a general practitioner, the target population of this research study.

Do I have to take part?

No, it is up to you to decide whether to take part. If you decide to take part, you will be given this information sheet to keep and asked to sign a consent form. Also, if you decide to take part you are still free to withdraw at any time, without giving a reason. A decision to withdraw from, or a decline

to take part in, this study will not affect you professionally and no colleagues will be informed of your actions.

What do I have to do if I take part?

The study will involve you participating in a 1:1 interview with a researcher in which you will be asked questions relating to social prescribing and social interventions. The interview will be voice recorded and later transcribed; you will be given the opportunity to approve the transcript of your interview. The purpose of this research study is not to test you on your knowledge in this area, or to make judgements on your clinical practice, it is to better understand your perceptions of the concept.

What are possible benefits of taking part?

By taking part you have the opportunity to influence the outcome of the study and help in forming a clearer understanding of social prescribing. It may influence future education, professional practice, and patient care.

Will my taking part in this study be kept confidential?

Yes, we do not need your name and will not identify you in anyway. All information that is collected about you during the research will be kept strictly confidential.

What are the possible risks to taking part?

No possible risks have been identified. The interview is not designed to cause you any distress. Everything discussed in the interview will be kept strictly confidential so will not affect your professional standing.

What will happen to the results of the research study?

The results of the study will be shared with relevant agencies and services and if applicable will be incorporated into existing policy, practice, and education. Conference papers will be submitted to appropriate forums and papers for publication may be produced. All results will be anonymised prior to this.

Who has reviewed the study?

This study has been reviewed and ethically approved at Birmingham City University ethics committee.

What if there is a problem?

Any complaint about the study will be addressed. If you have any concerns about the study, you should speak to the researcher who will do their best to answer your queries and to resolve the matter. Failing this, you can contact the Birmingham City University Ethics Committee Chair, Meryll Harvey, in writing at: meryll.harvey@bcu.ac.uk, or by telephone on 0121 331 6172.

Contact for further information:

Jessica Runacres
Graduate Teaching and Research Assistant / PhD Student
Birmingham City University
Faculty of Health,
Westbourne Road,
Edgbaston,
Birmingham B15 3TN

Telephone Number:0121-331-6067

E-mail: jessica.runacres@bcu.ac.uk

Thank you for considering your involvement in this study.



Information Sheet

You are being invited to take part in a research study being undertaken to provide evidence for part of a doctoral thesis. Before taking part, it is important for you to understand why the research is being done and what it will involve. Please take some time to read the following information carefully. Ask the researcher if there is anything that is not clear or if you would like more information.

Please take time to decide whether you wish to take part.

Thank you for reading this.

What is the purpose of the study?

The aim of this research is to examine social prescribing in practice with a view to producing a framework of knowledge to progress understanding and implementation. Below are the research objectives:

- To explore and quantify the underlying contributing factors to requiring a non-medical health intervention within a single service user population.
- To examine stakeholders' perceptions of SP in the context of healthcare.
- To understand the role of primary care in social prescribing.
- To investigate the role of social prescribing link workers.
- To consider the use of language surrounding social prescribing.
- To identify factors which hinder the implementation of social prescribing services.

Why have I been chosen?

You have been chosen because you are a link worker in a social prescribing service, the target population of this research study.

Do I have to take part?

No, it is up to you to decide whether to take part. If you decide to take part, you will be given this information sheet to keep and asked to sign a consent form. Also, if you decide to take part you are

still free to withdraw at any time, without giving a reason. A decision to withdraw from, or a decline to take part in, this study will not affect you professionally.

What do I have to do if I take part?

The study will involve you participating in a group interview with a researcher in which you will be asked questions relating to social prescribing and social interventions. The interview will be voice recorded and later transcribed; you will be given the opportunity to approve the transcript of the interview. The purpose of this research study is not to test you on your knowledge in this area, or to make judgements on your clinical practice, it is to better understand your perceptions of the concept.

What are possible benefits of taking part?

By taking part you have the opportunity to influence the outcome of the study and help in forming a clearer understanding of social prescribing. It may influence future education, professional practice, and patient care.

Will my taking part in this study be kept confidential?

Yes, we do not need your name and will not identify you in anyway. All information that is collected about you during the research will be kept strictly confidential.

What are the possible risks to taking part?

No possible risks have been identified. The interview is not designed to cause you any distress. Everything discussed will be kept strictly confidential so will not affect your professional standing.

What will happen to the results of the research study?

The results of the study will be shared with relevant agencies and services and if applicable will be incorporated into existing policy, practice, and education. Conference papers will be submitted to appropriate forums and papers for publication may be produced. All results will be anonymised prior to this.

Who has reviewed the study?

This study has been reviewed and ethically approved at Birmingham City University ethics committee.

What if there is a problem?

Any complaint about the study will be addressed. If you have any concerns about the study, you should speak to the researcher who will do their best to answer your queries and to resolve the matter. Failing this, you can contact the Birmingham City University Ethics Committee Chair, Merryl Harvey, in writing at: merryl.harvey@bcu.ac.uk, or by telephone on 0121 331 6172.

Contact for further information:

Jessica Runacres
Graduate Teaching and Research Assistant / PhD Student

Birmingham City University
Faculty of Health,
Westbourne Road,
Edgbaston,
Birmingham B15 3TN

Telephone Number: 0121-331-6067

E-mail: jessica.runacres@bcu.ac.uk

Thank you for considering your involvement in this study.



Information Sheet

You are being invited to take part in a research study being undertaken to provide evidence for part of a doctoral thesis. Before taking part, it is important for you to understand why the research is being done and what it will involve. Please take some time to read the following information carefully. Ask the researcher if there is anything that is not clear or if you would like more information.

Please take time to decide whether you wish to take part.

Thank you for reading this.

What is the purpose of the study?

- The aim of this research is to examine social prescribing in practice with a view to producing a framework of knowledge to progress understanding and implementation. Below are the research objectives:
- To explore and quantify the underlying contributing factors to requiring a non-medical health intervention within a single service user population.
- To examine stakeholders' perceptions of SP in the context of healthcare.
- To understand the role of primary care in social prescribing.
- To investigate the role of social prescribing link workers.
- To consider the use of language surrounding social prescribing.
- To identify factors which hinder the implementation of social prescribing services.

Why have I been chosen?

You have been chosen because you are a service user of a social prescribing/ social intervention service, the target population of this research study.

Do I have to take part?

No, it is up to you to decide whether to take part. If you decide to take part, you will be given this information sheet to keep and asked to sign a consent form. Also, if you decide to take part you are still free to withdraw at any time, without giving a reason. A decision to withdraw from, or a decline to take part in, this study will not affect you professionally.

What do I have to do if I take part?

The study will involve you participating in a 1:1 interview with a researcher in which you will be asked questions relating to social prescribing and social interventions. The interview will be voice recorded and later transcribed; you will be given the opportunity to approve the transcript of the interview. The purpose of this research study is not to test you on your knowledge in this area; it is to better understand your perceptions of the concept.

What are possible benefits of taking part?

By taking part you have the opportunity to influence the outcome of the study and help in forming a clearer understanding of social prescribing. It may influence future education, professional practice, and patient care.

Will my taking part in this study be kept confidential?

Yes, we do not need your name and will not identify you in anyway. All information that is collected about you during the research will be kept strictly confidential.

What are the possible risks to taking part?

No possible risks have been identified. The interview is not designed to cause you any distress. Everything discussed will be kept strictly confidential and will not affect the support you receive.

What will happen to the results of the research study?

The results of the study will be shared with relevant agencies and services and if applicable will be incorporated into existing policy, practice, and education. Conference papers will be submitted to appropriate forums and papers for publication may be produced. All results will be anonymised prior to this.

Who has reviewed the study?

This study will be reviewed and ethically approved at Birmingham City University ethics committee.

What if there is a problem?

Any complaint about the study will be addressed. If you have any concerns about the study, you should speak to the researcher who will do their best to answer your queries and to resolve the matter. Failing this, you can contact the Birmingham City University Ethics Committee Chair, Meryll Harvey, in writing at: meryll.harvey@bcu.ac.uk, or by telephone on 0121 331 6172.

Contact for further information:

Jessica Runacres
Graduate Teaching and Research Assistant / PhD Student

Birmingham City University
Faculty of Health,
Westbourne Road,
Edgbaston,
Birmingham B15 3TN

Telephone Number: 0121-331-6067

E-mail: jessica.runacres@bcu.ac.uk

Thank you for considering your involvement in this study.

Appendix 10: Consent Form (General Practitioners)



BIRMINGHAM CITY
University

Participant Identification Number:

CONSENT FORM

Title of Project: Qualitative semi-structured interviews with general practitioners

Name of Researcher: Jessica Runacres

PhD Student

Graduate Teaching and Research Assistant (GTRA)

Birmingham City University

Faculty of Health,

214 Ravensbury

Westbourne Road,

Edgbaston,

Birmingham B15 3TN

E-mail: jessica.runacres@bcu.ac.uk

Please initial box

I confirm that I have read and understand the information sheet for the above study. I have had the opportunity to consider the information and to ask questions which have been answered satisfactorily.

I understand that my participation is voluntary and that I am free to withdraw at any time without giving any reason and without penalty or my legal rights being affected.

I understand that the information collected about me may be used to support other research in the future, such as within a PhD thesis or publications, and may be shared anonymously with other researchers.

I understand that I will participate in a face-to-face interview during which my voice will be recorded, and that my words may be used in the study, in future journal publications and conference presentations, but I will not be identified.

I agree to take part in the above study.

Name of participant:

Signature

Date

Name of person taking consent

Signature

Date.

Appendix 11: Consent Form (Link Workers)



BIRMINGHAM CITY
University

Participant Identification Number:

CONSENT FORM

Title of Project: (INSERT YOUR RESEARCH ESSAY TITLE)

Name of Researcher: (INSERT YOUR FULL NAME)

Please initial each box

I confirm that I have had the details of this study explained to me. I have had the opportunity to consider the information and to ask questions which have been answered satisfactorily.

I understand that my participation is voluntary and that I am free to withdraw at any time without giving any reason and without penalty.

I understand that the information collected about me may be used within an academic piece of writing, and may be shared anonymously with other researchers

I understand that I will participate in computer based and recall tasks, my results from which will be recorded, but I will not be identified.

I agree to take part in the above study.

Name of Participant:

Signature

Date

Name of Person taking consent

Signature

Date.

Appendix 12: Consent Form (Service Users)



BIRMINGHAM CITY
University

Patient Identification Number:

CONSENT FORM

Title of Project: Exploring the processes involved in social prescribing from the service users viewpoint

Name of Researcher: Jessica Runacres

PhD Student

Graduate Teaching and Research Assistant (GTRA)

Birmingham City University

Faculty of Health,

214 Ravensbury

Westbourne Road,

Edgbaston,

Birmingham B15 3TN

E-mail: jessica.runacres@bcu.ac.uk

Please initial box

I confirm that I have read and understand the information sheet for the above study. I have had the opportunity to consider the information and to ask questions which have been answered satisfactorily.

I understand that my participation is voluntary and that I am free to withdraw at any time without giving any reason and without penalty or my legal rights being affected.

I understand that the information collected about me may be used to support other research in the future, such as within a PhD thesis or publications, and may be shared anonymously with other researchers.

I understand that I will participate in a face-to-face interview during which my voice will be recorded, and that my words may be used in the study, in future journal publications and conference presentations, but I will not be identified.

I agree to take part in the above study.

Name of Participant:

Signature

Date

Name of Person taking consent

Signature

Date.

Appendix 13: Interview Guide (General Practitioners)

GPs understanding of social prescribing and social interventions:

- What do you understand the term SP to mean?
- What do you understand the term social interventions to mean?

Attitudes towards SP and social interventions:

- What is your opinion of the use of SP and social interventions?
- Do you think that they play a role in health improvement? If so how? And if not, why?
- In general, what do you think are patient's opinions of SP and social interventions?
- In general, do you think patients understand what social prescriptions and social interventions are?
- Have you had any particularly negative feedback from patients who have been prescribed this?
- Have you had any particularly positive feedback from patients who have been prescribed this?

Prescribing social prescriptions or social interventions:

- How often do you prescribe a social prescription or intervention?
- What is the process of prescribing a social prescription or intervention?
- What factors do you think influence your decision to prescribe a social prescription or social intervention?
- What factors do you think dissuade you from prescribing a social prescription or social intervention?
- In general, what factors negatively affect the prescribing of social prescriptions social interventions?
- In general, what factors promote the prescribing of social prescriptions or social interventions?

Appendix 14: Interview Guide (Link Worker)

Link worker's understanding of SP and social interventions

- What do you understand the term SP to mean?
- What do you understand the term social interventions to mean?

Attitudes towards SP and social interventions

- What is your opinion of the use of SP and social interventions?
- Do you think that they play a role in health improvement? If so how? And if not, why?
- In general, what do you think are patient's opinions of SP and social interventions?
- In general, do you think patients understand what social prescriptions and social interventions are?
- Have you had any particularly negative feedback from patients who have been prescribed this?
- Have you had any particularly positive feedback from patients who have been prescribed this?

Data collection

- How do you collect patient data?
- What is your opinion of the digital data recording system?
- What factors do you think negatively affect your use of it?
- What information do you think needs to be collected on patients?

The SP, or social intervention, process

- What is the process of facilitating a prescribing a social prescription or intervention?
- In general, what factors negatively affect the process of social prescriptions social interventions?
- In general, what factors promote the process of social prescriptions or social interventions?
- What do you think patients think about the process?

Appendix 15: Interview Guide (Service Users)

Understanding of SP and social interventions

- What do you understand the term SP to mean?
- What do you understand the term social interventions to mean?
- Were you aware of SP or social interventions before you were referred to them for support?

Attitudes towards SP and social interventions

- What is your opinion of the use of SP and social interventions?
- Do you think that they play a role in health improvement? If so how? And if not, why?
- How easily did you access SP / social interventions as a means of support?

Data collection

- How does your current link worker record information you provide to them?
- What do you think the best way for them to record information would be?
- What is your opinion of a digital data recording system?
- How much information are you willing to provide to your link worker, and what sort of information. E.g., descriptive information vs personal information
- What information do you think needs to be collected from you by this service?

The SP, or social intervention, process

- What is the process of receiving a social prescription or social intervention?
- Overall has your experience of SP / social interventions been positive? If yes, why? And if not, why not?
- In general, what factors negatively affect the process of social prescriptions social interventions?
- In general, what factors promote the process of social prescriptions or social interventions?
- What do you think would improve the SP process?

Do you attend (*insert name here*)?

We are looking to recruit people who *attend (insert name here)* to participate in some research.

It would involve taking part in one telephone conversation or face-to-face chat to discuss the below:

- How you found out about the service
- Your experiences with the service
- Your opinion of the use of social activities for health.

This research is to gain a clearer understanding of the use of social prescriptions for health, such as social or exercise groups, and how they impact those utilising such services.

If you would like to know more, please contact Jessica Runacres.



Contact information:

Jessica Runacres:

Email: jessica.runacres@bcu.ac.uk

Phone: 0121 331 6067



Appendix 17: Summaries of articles included in the scoping review

<i>Number</i>	<i>Reference</i>	<i>Information presented</i>	<i>Type of data collected</i>	<i>Style</i>	<i>Location</i>	<i>Focus</i>	<i>Key points</i>
1	(Arab-Zozani et al., 2019)	Research	Quantitative	Academic	Iran	Social prescribing	SP can help reduce the use of healthcare services.
2	(Attree et al., 2011)	Review	Qualitative	Academic	UK	Social intervention	Most individuals perceived benefits of community engagement for their physical and psychological health, self-confidence, self-esteem, sense of personal empowerment and social relationships. However, unintended negative consequences were also identified for some individuals, such as exhaustion and stress.
3	(Bastiampillai et al., 2014)	Research	Qualitative	Academic	Australia	Social prescribing	A SP service was integrated successfully into the emergency department. The paper recommended larger scale studies.
4	(Benson et al., 2019)	Research	Quantitative	Academic	UK	Social prescribing	Validated the Personal Wellbeing Score for use in SP.
5	(Berenguera et al., 2017)	Research	Qualitative	Academic	Spain	Social intervention	Emphasises the importance of intersectoral collaboration for health promotion activities. Organisational changes in primary care could improve health promotion activities. Primary care workers were aware that health promotion falls within the scope of their responsibilities.
6	(Bertotti et al., 2015)	Research	Mixed methods	Social prescribing service report	UK	Social prescribing	The outcomes of service users remained stable over the research period, and no statistically significant difference in health outcomes was observed between the intervention and control group. Qualitative interviews revealed that service users had benefitted positively from SP.

7	(Bertotti et al., 2018)	Research	Qualitative	Academic	UK	Social prescribing	Adopted a realist approach to investigate stakeholder experience. Link Workers were pivotal to SP. Barriers identified: GP "buy-in", funding for the third sector.
8	(Bickerdike et al., 2017)	Review	Mixed methods	Academic	UK	Social prescribing	Poor quality evidence base. Issues with data collection tools and missing data. SP is widely advocated by implementation fails to provide evidence of success or value for money. Need to more rigorous evidence in the future.
9	(Blickem et al., 2013)	Research	Qualitative	Academic	UK	Long-term health conditions	A tool was developed that tailored access to local resources based on the individual service users' needs. This type of intervention cannot be successful unless there is capacity in the community, e.g., community services available.
10	(Bowden et al., 2019)	Research	Mixed methods	Academic	UK	Health-specific intervention	Improvement in asthma and self-esteem noted after children attended a singing group to support their asthma. Wider asthma education was also provided through the group.
11	(Brandling and House, 2007)	Research	Mixed methods	Academic	UK	Social prescribing	Clinicians were apprehensive about referring their patients to VCSE organisations due to the sustainability of such services.
12	(Brydges et al., 2015)	Research	Qualitative	Academic	USA	Social prescribing	Paramedics can better serve patients with unmet social and medical needs through SP. Services face several challenges that, if left unaddressed, threaten their success.
13	(Buck, 2016)	Review	Mixed methods	Charity report	UK	Social intervention	Gardens are also important for health and wellbeing, and to support recovery from illness. Further rigorous evidence is needed in this area. Interventions require collaboration between government and the charity sector.
14	(Carnes et al., 2017)	Research	Mixed methods	Academic	UK	Social prescribing	No differences were found between patients referred to SP and the control group. Implementation of SP was challenging. SP

							patients had high GP consultation rates, which fell in the year following referral, but whether this is linked to the referral is unconfirmed. The qualitative study identified that most service users had positive experiences with SP. Whether SP can contribute to social and psychological wellbeing is still undetermined.
15	(Chatterjee et al., 2018b)	Review	Mixed methods	Academic	UK	Social intervention	Detailed the various models of SP. Combined the various positive outcomes for SP identified including increased self-esteem, confidence, improvements in mental wellbeing and positive mood, reduced anxiety, depression, and negative mood. However, the review identified several gaps in the literature and notes the poor quality of some research.
16	(Chitson and Wylie, 2019)	Research	Qualitative	Academic	UK	Social prescribing	Medical students designed and implemented exercise-related SP projects on their longitudinal placement in general practice. The research found that students enjoyed the project, gained skills and knowledge, and it impacted their professional identity.
17	(Claffey et al., 2017)	Research	Mixed methods	Academic	UK	Social Prescribing	Used an online tool to automatically generate social prescriptions for geriatric patients that were lonely, socially isolated, and physically inactive. They found the tool and SP to be useful. This was very small scale.
18	(Crabtree et al., 2018)	Research	Qualitative	Social intervention report	UK	Social intervention	Explored perceptions of the health and wellbeing benefits of participating in a social intervention focussed on men's sheds. Findings indicated that men's sheds improved perceived level of social interaction and outlook on life. It also led to self-reported improvements in depression, and all

							participants perceived themselves to be fitter as a result.
19	(Davies et al., 2014)	Research	Qualitative	Academic	Australia	Social intervention	Created a framework for the impact of arts on health. The arts intervention was found to have various positive impacts on health and social health. This however was a qualitative study, so positive outcomes cannot be confirmed.
20	(Dayson and Bashir, 2014)	Research	Quantitative	Social prescribing service report	UK	Social prescribing	Identified a trend which pointed towards reductions in patients' use of hospital resources after referral to SP. Service users experienced improvements in their wellbeing and made progress towards better self-management of their condition.
21	(Dayson et al., 2016)	Research	Quantitative	Social prescribing service report	UK	Social prescribing	Reductions in service users' use of secondary care after they had been referred to SP were noted. Found improvements in the well-being of service users following their engagement with the service. Reported assumed cost savings to the NHS.
22	(Dayson and Bennett, 2016a)	Research	Quantitative	Social prescribing service report	UK	Social prescribing	Almost half of service users saw an increase in their health-related quality of life after referral. Improvements in people's, social connectedness and financial well-being in the 3-6 months following engagement were also identified. Projected cost savings for healthcare.
23	(Dayson and Bennett, 2017)	Research	Quantitative	Social prescribing service report	UK	Social prescribing	More than 90% of service users made progress on at least one wellbeing outcome measure and increases were recorded for almost half (48%) of all outcome scores. It was estimated that the well-being benefits experienced by service users paralleled to a social return on investment of £1.84 for every £1 invested.

24	(Dayson et al., 2019)	Research	Qualitative	Academic	UK	Social prescribing	Investigated the sustainability of funding provided to SP organisations. Compared two SP interventions funded in different ways. It aimed to understand the extent to which different methods of funding SP conform to key features of the New Public Management or New Public Governance in their design and implementation. It identified multiple challenges because of the current funding system for SP.
25	(Dayson and Leather, 2018)	Research	Quantitative	Social prescribing service report	UK	Social prescribing	After referral positive outcomes in relation to health, mental well-being, trust of people in their community, social connectedness, and service users' ability to self-care were found. The research was not able to assess the impact on demand for primary and secondary care, but initial findings indicate that service users recorded up to 9% fewer A&E and up to 7% fewer GP attendances post referral to the SP service.
26	(Elston et al., 2019)	Research	Quantitative	Social prescribing service report	UK	Social prescribing	Examined the impact of link workers in a holistic model of SP. Offered a map of SP referral routes. Examined the impact of SP across 12 months. They found an increase in positive health outcomes, but an overall increase in healthcare usage. They identified the link workers as an asset to SP.
27	(Fancourt et al., 2019b)	Research	Quantitative	Academic	UK	Social prescribing	Social and community engagement was found to be associated with a reduced risk of dementia. Community cultural engagement (e.g., visiting museums) was also found to be associated with a lower hazard of developing dementia in older age independent of demographic and social factors.
28	(Farenden et al., 2015)	Research	Quantitative	Social prescribing	UK	Social prescribing	Reported positive outcomes for patients three and six months after referral. Most GPs were

				service report			satisfied with the quality of the service and thought it had improved wellbeing of their patients.
29	(Faulkner, 2004)	Research	Qualitative	Academic	UK	Social prescribing	Voluntary patient referral services, such as SP, expand the referral options available for managing patients with psychosocial issues in general practice.
30	(Fleischer and Grehan, 2016)	Review	Mixed methods	Academic	UK	Social intervention	The arts have beneficial effects on health, health care and well-being, especially for relieving stress and improving socialisation.
31	(Friedli et al., 2012)	Research	Mixed methods	Social prescribing service report	UK	Social prescribing	Link workers were found to be crucial to the success of the service. The flexibility and holistic approach taken in SP supported service user engagement. Further evidence for SP is required, including investigation of the costs vs benefits.
32	(Friedli and Watson, 2004)	Review	Mixed methods	Charity report	UK	Social prescribing	Developing an evidence base for SP is made challenging by inconsistencies in the term, and a lack of consistent outcome measures. The poor rigour and design of research make it challenging to draw conclusions from existing research.
33	(Frostick and Bertotti, 2019)	Research	Qualitative	Academic	UK	Social prescribing	Link workers were found to be key to the success SP. They can facilitate positive behaviour change, but they must be recruited, trained, and supported with a clear understanding of the demands of the role. Research examined the training, skills and experience required by link workers. Clinical supervision and support were found to be essential to conduct the work safely.
34	(Galway et al., 2019)	Research	Qualitative	Academic	UK	Social prescribing	The introduction of a digital SP system was found to add value to existing systems and could be used to enhance services, such as reducing the stigma of help-seeking, providing a wider reach to

							offer improved access to services, and improving the monitoring and measurement of impact.
35	(Gilbert et al., 2018)	Research	Qualitative	Academic	UK	Social intervention	Provided evidence to support the feasibility of an NHS community cookery programme for older people. This was found to increase participants' capability and opportunity to implement dietary behaviour change.
36	(Grant et al., 2000)	Research	Quantitative	Academic	UK	Social prescribing	Randomised controlled trial investigating outcomes after referral to SP service. Referral led to improved clinical outcomes compared with typical GP care in managing psychosocial problems, but at a higher financial cost.
37	(Grayer et al., 2008)	Research	Quantitative	Academic	UK	Social prescribing	Patients valued the support they received from the service. There was some evidence of effectiveness in reducing negative health outcomes.
38	(Greasley and Small, 2005)	Research	Quantitative	Academic	UK	Social intervention	A welfare advice service for primary care patients was implemented and resulted in financial benefits for one in four service users.
39	(Hamilton-West et al., 2019)	Research	Qualitative	Academic	UK	Social prescribing	Identified that services should ensure SP services are developed with the involvement of relevant stakeholders. Also, that information governance and data sharing agreements are in place at service inception. Finally, staffing levels need to be sufficient to ensure the range of activities involved in service delivery are covered, for example, data monitoring, reporting, evaluation, and communication with stakeholders.
40	(Hanlon et al., 2019)	Research	Qualitative	Academic	UK	Social prescribing	Some service users reported improvements in outcomes post SP referral; these were related to greater participation in community activities and sense of competence in social interaction.

41	(Harrison, 2014)	Review	Qualitative	CCG report	UK	Social prescribing	Generic support should be offered rather than condition-specific support to recognise the needs of the individual. Peer support could facilitate SP.
42	(Hassan et al., 2020)	Research	Qualitative	Academic	UK	Social prescribing	Findings supported the benefit of SP to improve mental wellbeing and reduce burden on healthcare.
43	(Healthwatch Shropshire, 2019)	Research	Qualitative	Social prescribing service report	UK	Social prescribing	Identified barriers to accessing SP such as a lack of understanding of the concept, limited time, and transport issues. The most vulnerable populations were farmers, older people, and people living in poverty amongst others. Findings indicated that raising awareness of SP was important.
44	(Heijnders and Meijs, 2018)	Research	Qualitative	Academic	Netherlands	Social prescribing	The importance of SP link workers. After referral to a community wellbeing organisation, participants experienced an increase in strength, self-confidence, self-reliance and the number of social contacts, and stated that they were experiencing better health.
45	(Howarth et al., 2018)	Research	Mixed methods	Academic	UK	Social intervention	Evaluated the impact of a mental health recovery programme as an intervention to reduce social inclusion and improve engagement for people with mental health problems. It was found to support people with poor mental health to re-engage with the community.
46	(Husk et al., 2016)	Review	Mixed methods	Academic	UK	Social prescribing	Findings highlighted that adherence could be improved through having an activity leader who is skilled and knowledgeable about the individual's condition. The evidence base is not sufficiently developed to make any conclusions from it.
47	(Jensen et al., 2017)	Review	Mixed methods	Academic	Scandinavia	Social intervention	Sweden is ahead of Norway and Denmark in terms of arts on prescription. All three countries should draw on the research conducted in the UK.

48	(Kellezi et al., 2019)	Research	Qualitative	Academic	UK	Social prescribing	Study assessed the degree to which the 'social cure' model of psychosocial health captures the understandings and experiences of healthcare staff and patients in SP pathway and the degree to which these psychosocial processes predict the effect of the pathway on healthcare usage. Findings noted the importance of link workers.
49	(Kilgarriff-Foster and O'Cathain, 2015)	Review	Mixed methods	Academic	UK	Social prescribing	Discussed the poor quality of the evidence base for SP. Research reported increased wellbeing and other health factors after social prescription, however, there was a lack of high-quality studies to determine effectiveness. Without proper funding, SP could not advance its evidence base.
50	(Kimberlee, 2015b)	Research	Mixed methods	Academic	UK	Social prescribing	There is little evidence of the value of SP. Research found a social return on investment of £2.90 for every £1 invested. Highlighted the need to understand the broader social impact of SP.
51	(Kimberlee, 2015a)	Research	Qualitative	Academic	UK	Social prescribing	There is no clear and agreed definition of SP. Findings outlined four levels of SP: signposting, light, medium and holistic. There are issues with measuring effectiveness in SP.
52	(Kimberlee, 2016)	Research	Mixed methods	CCG report	UK	Social prescribing	Improved service user wellbeing after engagement with SP. Reduced GP attendances were also found.
53	(Kimberlee et al., 2017)	Review	Quantitative	Academic	UK	Social prescribing	The evidence for SP broadly supports its potential to reduce demand on healthcare, and reduce costs, however this is not yet fully quantified.
54	(Kimberlee et al., 2014a)	Research	Mixed methods	Social prescribing service report	UK	Social prescribing	Link workers highlighted that their role was not just to improve health issues, but also to address underlying issues which impact health and wellbeing.
55	(Laing et al., 2017)	Research	Qualitative	Academic	UK	Social prescribing	Positive physical and social changes were seen post referral to SP. The holistic approach taken

							was identified as a key facilitator to this. Long-term research is required to improve the evidence base.
56	(Leavell et al., 2019)	Review	Mixed methods	Academic	USA	Social prescribing	Better technology is needed to track patients' progress, this will support the evidence base. SP needs to be better integrated into healthcare services.
57	(Loftus et al., 2017)	Research	Quantitative	Academic	UK	Social prescribing	SP has been found to increase patient wellbeing and self-esteem; however, it has not been found to reduce GP workload. More research is needed to determine the benefits of SP for primary care.
58	(Longwill, 2014)	Research	Mixed methods	Social prescribing service report	UK	Social prescribing	A reduction in GP attendance was seen post referral to SP service. GPs reported valuing the service highly.
59	(Lovell et al., 2017)	Review	Mixed methods	Academic	UK	Social prescribing	Identified key factors which contributed to the uptake and engagement of SP. These included: accessibility of services, supported uptake, and flexible interventions.
60	(Mann et al., 2017)	Review	Mixed methods	Academic	UK	Social intervention	There are various groups of social interventions, however, there is poor evidence all types of interventions.
61	(Maughan et al., 2016)	Research	Quantitative	Academic	UK	Social prescribing	SP could reduce healthcare use, and therefore reduce the financial and environmental costs of healthcare. The NHS needs to reduce its carbon footprint by 80% by 2050. Although SP showed a trend towards reduced healthcare use, results demonstrated no statistical difference in the financial and carbon costs of healthcare use. The associations found did not achieve significance due to the small sample size.
62	(Maund et al., 2019)	Research	Mixed methods	Academic	UK	Social intervention	Investigated nature-based interventions for the treatment of poor mental health. Improvements

							in mental health were found, and improved physical health was experienced. Support with transport was also valued by service users.
63	(McLoughlin et al., 2019)	Research	Qualitative	Academic	UK	Social prescribing	Examined the impact of a SP intervention on an elderly carer population. Found an increase in day centre and meals on wheels usage. Also, an increase in community support services, such as the community nurse.
64	(Mercer et al., 2019)	Research	Quantitative	Academic	UK	Social prescribing	Findings were unable to support the effectiveness of referral to SP services. Efforts to boost the uptake and engagement in SP is required.
65	(Mercer et al., 2017)	Research	Quantitative	Academic	UK	Social prescribing	Community engagement is important to prevent and reduce health inequalities. Link workers are vital to facilitate this process.
66	(Moffatt et al., 2017)	Research	Qualitative	Academic	UK	Social prescribing	Examined the impact of the link worker in SP. Found an increase in multiple health and wellbeing factors after referral to SP. Detailed the aspects of a link worker's role.
67	(Mossabir et al., 2015)	Review	Mixed methods	Academic	UK	Social prescribing	Some studies reported improved patient health outcomes, and reduced costs, although minimal measures of participants' physical health outcomes are adopted.
68	(Panagioti et al., 2018)	Research	Quantitative	Academic	UK	Social intervention	No significant benefits of health coaching on patient activity, quality of life, depression, and self-care.
69	(Payne et al., 2019)	Research	Qualitative	Academic	UK	Social prescribing	Found SP to benefit users in several ways, including helping them address social problems, increasing their engagement with activities and supporting them to recognise their personal and social assets and opportunities.
70	(Pescheny et al., 2018a)	Research	Qualitative	Academic	UK	Social prescribing	Facilitators and barriers to uptake and adherence in SP were examined. The following factors affecting uptake and adherence to SP were

							identified: patients' trust in GPs, navigators' initial phone call, supportive navigators and service providers, free services, and perceived need and benefits. The barriers to uptake and adherence identified were fear of stigma of psychosocial problems, patient expectations, and the short-term nature of the programme.
71	(Pescheny et al., 2019a)	Research	Quantitative	Academic	UK	Social prescribing	Aimed to assess the change in energy expenditure levels of service users after participation in a SP scheme. It was identified that SP may have the potential to increase the physical activity levels of service users and promote the uptake of physical activity in inactive groups. Link workers were important to this finding.
72	(Pescheny et al., 2018c)	Review	Mixed methods	Academic	UK	Social prescribing	Discussed the poor evidence base for SP. There is a lack of literature that looks at the facilitators and barriers. More robust research is required in general. The review identified some facilitators and barriers to SP in practice.
73	(Pescheny et al., 2019b)	Review	Mixed methods	Academic	UK	Social prescribing	Considered the poor quality of current evaluations of the SP literature, and the poor quality of the evidence. The review found that the evidence base is mixed. Whilst some studies found improvements in health and wellbeing, health-related behaviours, self-concepts, feelings, social contacts, and day-to-day functioning a social prescription, others did not.
74	(Philip et al., 2019)	Review	Mixed methods	Academic	UK	Social intervention	Discusses the physical and psychological benefits of music and dance. Confusion around who funds such interventions. The language surrounding SP is challenged, and issues with evaluating such interventions are highlighted. Typical scientific

							methods of evaluation are challenging to apply to SP however, more robust methods are required.
75	(Pilkington et al., 2017b)	Review	Mixed methods	Academic	UK	Social prescribing	Findings from this study indicated that there is limited information to inform the use of SP to support people with type 2 diabetes. Challenges identified included defining the concept and searching the diverse information on the internet.
76	(Polley et al., 2017a)	Review	Quantitative	Academic	UK	Social prescribing	The evidence is broadly supportive of SP's potential to reduce demand on healthcare. The quality of this evidence is weak. SP has developed from the 'bottom-up' due to a lack of support from the 'top-down'. Before support from national bodies, the evidence base needs to be improved. Development of a common outcome framework is needed to support this.
77	(Pons-Vigués et al., 2019)	Research	Qualitative	Academic	Spain	Social intervention	Reported positive reviews from the healthcare professionals involved. Healthcare professionals require support to implement community health promotion. Engagement needs to be monitored to determine impact. The views of all stakeholders involved in such interventions must be taken into consideration during research.
78	(Popay et al., 2007b)	Research	Quantitative	Academic	UK	Social prescribing	GPs support social issues; however, their responses are limited. More pathways to support non-clinical needs are required.
79	(Prior et al., 2019)	Research	Quantitative	Academic	UK	Social intervention	Significant improvements in body mass index, systolic blood pressure, mental well-being, and health-related quality of life were identified. Further long-term evaluations are required to support these findings.
80	(Quirk and Haake, 2019)	Research	Qualitative	Academic	UK	Social intervention	Parkrun was found to be important to provide a safe and supportive environment for people with long-term health conditions to engage in physical

							activity. Challenges were identified as communication, demonstrating impact and the project's dependence on volunteers for delivery.
81	(Redmond et al., 2019)	Research	Qualitative	Academic	UK	Social intervention	Results suggested that participants were better able to self-manage aspects of their own health after intervention. Discussed the need for interventions in the community to support SP; without these it is not possible.
82	(Rempel et al., 2017)	Review	Mixed methods	Academic	UK	Social prescribing	No agreed definition of SP. The paper uses the term social referral due to the medical connotations of "prescription". Highlights the poor evidence base for SP and the need for consistent measurement.
83	(Rubio-Valera et al., 2014)	Review	Qualitative	Academic	Spain	Social prescribing	Primary care was thought to be well-placed to implement SP, however, workload, lack of time and referral resources, and the predominance of the biomedical model were found to hamper implementation.
84	(Santoni et al., 2019)	Research	Quantitative	Academic	UK	Social prescribing	Previous research highlights a lack of GP 'buy-in' for SP. Most medical students (91%) had not heard of the term SP previously. After a teaching session on the topic, most students (98%) regarded the concept to be useful and relevant to their future careers. The paper discussed the need to implement teaching of this concept at the medical education level to support buy-in from GPs and their general awareness of the option.
85	(Sharp et al., 2018a)	Research	Qualitative	Academic	UK	Social intervention	The governance of social interventions was identified as a concern. Health professionals felt that interventions and SP needed to be integrated into healthcare. GPs referenced their lack of

							knowledge about social interventions and the time pressure on them.
86	(Sharp et al., 2018b)	Review	Mixed methods	Academic	UK	Social intervention	Discussed patient demand for holistic care and why primary care is the most suitable setting for such interventions. Healthcare buy-in was essential to facilitate patient engagement. The main barriers to integration identified were funding, negative perceptions, and negative NHS staff attitudes or lack of knowledge. Furthermore, it was found that a reduction in, or termination of, funding was often the reason for service closure.
87	(Silke et al., 2018)	Research	Mixed methods	CCG report	UK	Social prescribing	Limited healthcare professional capacity was identified as a barrier to the use of SP. Service users were positive about the support received from link workers.
88	(Skivington et al., 2018b)	Research	Qualitative	Academic	UK	Social prescribing	SP can impact the social determinants of health. Research found challenges in forming relationships between SP and primary care. If link workers are based in primary care, this is likely to support engagement with the service and use of it from GPs. Community organisations were anxious about their ability to meet the demands of SP due to funding issues.
89	(Smith et al., 2018)	Research	Quantitative	Academic	USA	Social intervention	Evaluated the implementation of a falls prevention program which incorporated non-clinical interventions. Findings noted the need to expand the delivery infrastructure for fall prevention programs to better support older adults in rural areas.

90	(Smith et al., 2019b)	Review	Quantitative	Academic	UK	Social prescribing	The research identified that there is a lack of evidence for the effectiveness of SP for older adults in the community. Given that frailty is currently a clinical priority, and SP is considered a key future direction in the provision of community care, this is a major limitation of the evidence base.
91	(South et al., 2008)	Research	Mixed methods	Academic	UK	Social prescribing	Primary care is an ideal access point SP. SP supports the integration of healthcare and community services. Discusses the impact of poor funding.
92	(Southby and Gamsu, 2018)	Research	Qualitative	Academic	UK	Social intervention	Discusses the benefits of collaboration between primary care and the community sector. Barriers found include shared understanding, capacity, resources, trust, strong leadership, operational systems, and governance.
93	(South Liverpool Citizens Advice and Liverpool Clinical Commissioning Group, 2017)	Research	Qualitative	CCG report	UK	Social prescribing	Link workers stated that communication and engagement were critical to the engagement of service users, and that feedback and follow up made a real difference.
94	(Steadman et al., 2017)	Research	Qualitative	Charity report	UK	Social prescribing	The research highlighted the importance of a patient-centred approach, link workers, and strong links with community support for SP. The short-term nature of many social interventions was identified as a barrier.
95	(Stickley and Eades, 2013)	Research	Qualitative	Academic	UK	Social intervention	Discussed previous research on arts on prescription. Participants reported increased self-

							confidence, improved social and communication skills, and increased motivation and aspiration.
96	(Stickley and Hui, 2012b)	Research	Qualitative	Academic	UK	Social intervention	Examined the benefits of arts on prescription, in particular the social and peer support opportunities. Issues surrounding funding and commissioning.
97	(Stickley and Hui, 2012a)	Research	Qualitative	Academic	UK	Social intervention	Explored the experiences of service users engaging in arts on prescription. Link workers were identified as important. Various benefits of the intervention were explored.
98	(Sumner et al., 2019)	Research	Quantitative	Academic	UK	Social intervention	Higher baseline wellbeing was associated with increased engagement. Deprivation was also associated with engagement and adherence. Individuals with lower wellbeing are less likely to engage, so, therefore, they require additional support to engage. Link workers were identified as important to facilitate engagement.
99	(Taylor et al., 2017)	Research	Qualitative	Academic	UK	Social prescribing	Pharmacists considered SP to be part of their role in signposting, however, they were concerned about the added workload of this. This related to GPs also, who lack capacity for extra work.
100	(Taylor et al., 2019)	Research	Qualitative	Academic	UK	Social prescribing	Currently pharmacists are not consistently integrated into SP pathways. There is a lack of awareness and knowledge of SP which could impact 'buy-in' Participants believed pharmacists were well positioned within the community to deliver SP, so therefore able to be involved in identifying individuals that may benefit. Barriers

							to their involvement, included capacity, funding, and training.
101	(Teuton, 2015)	Review	Mixed methods	NHS report	UK	Social prescribing	There is evidence to suggest that holistic SP can support people to address social issues which impact their mental health. The evidence for SP services is of mixed quality.
102	(The Health Foundation, 2015a)	Research	Mixed methods	CCG report	UK	Social prescribing	The health and wellbeing of participants remained stable over the intervention period. Analysis showed no statistically significant change in health outcomes between intervention and control groups.
103	(Thomson et al., 2015)	Review	Mixed methods	Academic	UK	Social intervention	The review recommended the robust evaluation of SP services. SP has been found to increase self-esteem, improve an individual's sense of control, and reduce symptoms of anxiety and depression.
104	(Thomson et al., 2018)	Research	Mixed methods	Academic	UK	Social intervention	Participants appreciated the social element of the intervention. The most effective SP involves the use of a link worker. Discussed the importance of community engagement for wellbeing, and the importance of community services.
105	(Tierney et al., 2019)	Research	Mixed methods	Academic	UK	Social prescribing	Noted the importance of link workers in the SP process. There are various definitions of SP, in this paper it is termed care navigation. This has led to the implementation of the link worker role and SP being varied. This could make comparison difficult.
106	(Todd et al., 2017)	Research	Qualitative	Academic	UK	Social intervention	The research explored how museums created opportunities for social inclusion and wellbeing in socially isolated older individuals. Museums can appear physically intimidating to those who are not frequent attendees. Facilitator training is required. The importance for facilitators to

							consider individual experiences as well as group ones was highlighted.
107	(Vogelpeol and Jarrold, 2014)	Research	Qualitative	Academic	UK	Social intervention	Identified that arts programmes can help address social isolation in older individuals with sensory impairments. Participation can also lead to increased self-confidence, mental wellbeing, and social support.
108	(Waddington-Jones et al., 2019)	Research	Qualitative	Academic	Switzerland	Social intervention	Discussed the positive implications of collaborative composition in music on wellbeing. Discussed / found the importance of link workers to facilitate the process.
109	(Wahlbeck et al., 2017)	Review	Mixed methods	Academic	Finland	Social intervention	The evidence for the mental health impact of broader community-based interventions, such as SP, is scarce. There are effective interventions to promote wellbeing and mental health, but a joined-up approach is required.
110	(Wessex Academic Science Network, 2017)	Research	Mixed methods	CCG report	UK	Social prescribing	Identified the following facilitators for the implementation and delivery of SP: co-design with stakeholders, developed relationships with stakeholders, and the support of GPs.
111	(White et al., 2010)	Research	Mixed methods	CCG report	UK	Social prescribing	Improvements in mental health were seen after referral. Patients valued the support offered through SP. Some evidence was found to suggest that patients reduced their attendance at GP practices.
112	(White et al., 2017)	Research	Qualitative	Academic	UK	Social prescribing	Health professionals were found to be mistrustful of unknown VCSE services and concerned about their accountability for referrals that were unsuccessful. They raised issues of governance. An integrated approach is required for successful SP, and healthcare professionals buy-in is

							essential. Discussed the importance of engagement in community activities for health.
113	(Whitelaw et al., 2017)	Research	Qualitative	Academic	UK	Social prescribing	There are varied terms for SP. Lack of evidence for SP. GP 'buy-in' is required for successful SP. SP can support the social determinants of health.
114	(Wigfield et al., 2015)	Research	Mixed methods	Academic	UK	Social prescribing	Research tools to better measure the outcomes of SP are required. More consideration is needed on how SP links with primary healthcare. A greater amount of information needs to be provided to service users at the point of referral to support uptake and engagement.
115	(Wildman and Wildman, 2019)	Review	Qualitative	Academic	UK	Social prescribing	Highlights the need for mixed methods research into SP. Considers the challenges of applying economic evaluation to complex interventions using the example of a novel health intervention based on the social model of health. Discusses the challenges of evaluating the cost of SP services due to the multiple factors involved.
116	(Wildman et al., 2019a)	Research	Qualitative	Academic	UK	Social prescribing	The importance of link workers to facilitate engagement. The importance of healthcare professional 'buy-in'. Challenges to service user engagement included: variation in the volume and suitability of primary-care referrals, link worker capacity, and link workers' training inadequately preparing them for their complex and demanding role. Lack of funding for SP services and interventions in the community.
117	(Wildman et al., 2019b)	Research	Qualitative	Academic	UK	Social prescribing	There is limited evidence for SP and robust studies are required. Service users reported reduced social isolation and improvements in their condition management and health-related behaviours. Service users were appreciative of the holistic and personalised service provided. A lack

							of suitable and accessible voluntary and community services for onward referral acted as a barrier to involvement for some participants.
118	(Woodall et al., 2018)	Research	Mixed methods	Academic	UK	Social prescribing	The evidence for SP is inconclusive and this therefore impacts commissioning. The importance of link workers and community services were noted. There were varied positive outcomes from intervention.
119	(Wylie and Leedham-Green, 2017)	Research	Qualitative	Academic	UK	Social intervention	Discusses the challenges of implementing health promotion education in medical training. These included a lack of "deep learning", e.g., practical experience with such services during education.